OTS: 60-11,415

JPRS: 2407

27 May 1960

Reproduced From Best Available Copy SOVIET ABSTRACTS
CHEMISTRY

Book No. 23, 1959

Abstracts 80906 thru 84552

Approved for Public & lease Distribution Unlin & ed

19990714 109

Distributed by:

OFFICE OF TECHNICAL SERVICES U. S. DEPARTMENT OF COMMERCE WASHINGTON 25, D. C.



U. S. JOINT PUBLICATIONS RESEARCH SERVICE 205 EAST 42nd STREET, SUITE 300 NEW YORK 17, N. Y.

JPRS: 2407 CSO: 3410-N

SELECTED TRANSLATIONS OF

ABSTRACT IN REFERATIVNYY ZHURNAL - KHIMIYA, No. 23, 1959.

This report consists of complete translations of the Russian-language abstracts of articles which were originally published in the Sino-Soviet bloc and in Yugoslavia, excluding the USSR.

The Soviet subject classification system used in the original Russian language abstracts has been followed in this publication.

Poland COUNTRY Physical Chemistry. General Problems. CATEGORY

80906 RZKhim., No. 23 1959, No. ABS. JOUR. :

Stronski, Ignacy AUTHOR

Not given INST. International Conference of Nuclear Spec-TITLE

troscopy and Radiochemistry Held at the United Institute of Nuclear Research in *

Kosmos (Polska), 1958, B4, #4, 347-352. ORIG. PUB. :

No Abstract. ABSTRACT

CARD: 1/1

* Dubno, USSR. 11-14 February 1958

B-3 : Czechoslovakia COUNTRY

: Physical Chemistry. Atom. CATEGORY

: RZKhim., No. 23 1959, No. 80930 ABS. JOUR.

: Horak, Zdenek AUTHOR

: Not given INST. : Analytical Wave Functions of K-State TITLI

in Neon

: Ceskosl. casop. fys., 1958, 8, #6, 734 Czechosl Phys. 2, 1958, 8, #6, 745 ORIG. PUB.

: No abstract. ABSTRACT

Poland COUNTRY

B-3

80934

CATEGORY

ABS. JOUR. : RZKhim., No. 23 1959, No.

Kunisz, Maria D. AUTHOR

Not given INST. Evaluation of Spectral Line Intensities of TIPLE

Some I and II Doublets in Secondary Series, In the Arc Spectra of Aluminum and Indium.

Acta phys. polon., 1958, 17, #6, 455-461. ORIG. PUB. :

The intensity ratio component of secondary ABSTRACT

series doublets in spectra of Al I and In I were measured. Deviations from the interval

rule depend on the doublet's place in the

series.

-- N. Yashin

CARD: 1/1

Bull : Poland COUNTRY : Physical Chemistry. Molecule. Chemical CATEGORY

Bond.

809.56 No. 1959, : RZKhim., No. 23 ABS. JOUR.

: Franckowiak, D.; Korbutt, L.; Korbutt, T. AUTHOR

: Not given. INST.

: Fluorescence of Solutions of Eosine in TITLE

Glucose

: Bull. Acad. polon. sci. Ser. sci. math. ORIG. PUB.

astron., et phys., 1958, 6, #12, 781-783. : Absorption and fluorescence (F) spectra ABSTRACT as well as discharges-F (NF) upon excitation of glucose solutions of eosine (I)

(prepared by boiling at different temperatures and pressures, b.p. 50-140) by various wave lengths were investigated. concentration was 2 x 10-5 g per 1 of glu-The change of boiling temperature did not cause a change or a shift of the fluorescence band with its maximum at 5500 A.

The fluorescence band is ascribed to the non-assocated molecules of I. At the same

CARD: 1/3

: Poland

D-4

CATEGORY

ABS. JOUR.: RZKhim., No. 23 1959, No.

809 56

AUTHOR

INST.

TITLE

ORIG. PUB. :

ABSTRACT

: time the absorption spectrum of I changes considerably with the increase of boiling temperature, while the maximum at 5300 A decreases and that at 5100 A increases. The first maximum is apparently caused by dimers, while the second is due to monomers. Ap for I in glucose was determined by a comparison with a known ar in water solution of I. Upon an increase of boiling temperature AF increases a little, while the drop in transmissivity, starting at A(excitation) 5450 A is still slower. The observed phenomena

CARD: 2/3

COUNTRY

: Poland

B.4

CATEGORY

ABS. JOUR.

: RZKhim., No. 23 1959, No.

809.56

AUTHOR

INST.

TITLE

ORIG. PUB.

ABSTRACT

: were explained by the fact that upon an increase of boiling temperature the number of I dimers decreases while the number of monomers increases. Antistoke's drop of 2F, which starts at 5450 A is explained by the presence of dimers absorption band in this region.

- V. Yermolaev

CARD: 3/3

: RUMANIA

B-4

CATEGORY

: Physical Chemistry

ABS. JOUR.: RZKhim., No. 23 1959, No.

80957

AUTHOR

: Agirbiceanu, I.; Hagiescu-Miriste, M.; *

INST.

: Inst. petrol si gaze, Bucuresti

TITLE

Fluorescent Spectra of the Products Formed Upon a High Frequency Electrical Discharge in

Gaseous Aromatic Hydrocarbons.

ORIG. PUB. :

Lucrarile Inst. petrol. si gaze Bucuresti,

1957, 3, 327-329.

ABSTRACT '

: The real distribution of energy in fluorescent spectra (4046-6233 A) of substances formed upon high frequency electrical discharge (outer electrodes) in vapors of benzene, toluene, @-xylene, m-xylene and p-xylene was studied in order to determine the complexity of the molecules formed upon the discharge. From the energy distribution curves for various substances studied the proof of B. C. Neporent and B. I. Stepanov theories was deduced (Uspekhy phys. Nauk, 1951, XVIII, #3). This proof is based on

CARD: 1/2

* Weismann, I.

COUNTRY

: Rumania

B ... #

CATEGORY

: Physical Chemistry

ABS. JOUR.

No. : RZKhim., No. 23 1959,

80957

AUTHOR

INST.

TITLE

ORIG. PUB.

ABSTRACT

: the assumption that when the molecules become more complex, the probability of inner redistribution of energy increases. It was observed that the fluorescent intensity of the studied substances decreased in fact from the less complex benzene derivatives to the more complex xylene derivatives.

-- From Author's Resume

CARD: 2/2 COUNTRY : GDR

CATEGORY : Physical Chemistry

ABS. JOUR.: RZKhim., No. 23 1959, No. 81025

AUTHOR : Weber, K. -H INST. : Not given

TITLE : Explanation of the Proton Magnetic Absorp-

tion Resonance in Oriented Liquid azoxyphenol-

B-4

p-n-Alkylether Crystals

ORIG. PUB.: Ann. Physik, 1959, 3, #1-2, 1-27.

ABSTRACT : A detailed theoretical analysis of

structure and of the intramolecular rotation modes in liquid crystals of azoxyphenol-p-n-alkylether was presented. The magnetic proton resonance data was used to this end. The second moment (SM) of absorption line was calculated by assuming that the inner rotation is slightly delayed. SM temperature dependence was calculated using as a basis the Cooperative Interactions Theory (Bragg W. L., Williams E. J., Proc. Phys. Soc., 1934, A145, 699). In the 90-1400

CARD: 1/2

GOUNTRY : GDR B-4

CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 81025

AUTHOR : INST. : TITLE :

ORIG. PUB.

ABSTRACT: temperature range good agreement between theoretical and empirical data was obtained. SM dependence on temperature, calculated on the basis of other assumptions did not agree with the empirical data.

-- A. Pomerantzev

COUNTRY : GDR B-5
CATEGORY : Physical Chemistry. Crystals.

ABS. JOUR.: RZKhim., No. 23 1959, No. 81063

AUTHOR : Lehman, Hans-Albert; Tiess, Detlef

INST. : Not Given
TITLE : Modification of LiBO2 with a Low Temperature

Structure of <- Cristobalite.

ORIG. PUB.: Chem. Techn., 1959, 11, #5, 260.

ABSTRACT: Upon a stepwise thermal decomposition of LiBO2.8H2O, at atmospheric pressure, 3 non-aqueous modifications (4, A and 8) were obtained in addition to LiBO2.2H2O.6-Phase, containing 0.35-0.05 moles of H2O per 1 mole of LiBO2 exists in the temperature range of 200-3500. At 350-5800 a metastable A-form was observed. A-form was easily transformed into a familiar a-modification. Based on X-ray analysis, the structure of A-form of low temperature modification of (4) cristo-balite consisting of B atoms tetrahedrally

surrounded by 0 atoms was proposed. In Y-form

CARD:

1/2

COUNTRY : CDR B-5

CATEGORY : Physical Chemistry

ABS. JOUR. : RZKhim., No. 23 1959, No. 81064

AUTHOR : INST. : TITLE :

orig. PUB.

an imperfect shell structure was attained, which could be compared with that of B₂O₃ and cubic HBO₂(%-HBO₂) structures. Chain structure is most probably characteristic of ~-form (similar to (CaB₂O₁) structure). Compounds LiBO₂·8H₂O and Li(Na)BO₂·2H₂O should be considered as complex salts with x structural formulae: Li(H₂O)₆ B(OH)₁ and Li(Na)B(OH)₁, containing B(OH)₁ anion on the basis of their chemical and thermal be-

haviors and X-ray data.

-- E.G.

CARD: 2/2

L

B-5 Rumania COUNT RY Physical Chemistry CATEG)RY ABS. FOUR. : RZKhim., No. 23 1959, No. 81091 Motoc, C. 5 OHTUA Not given INST. Cohesive Energy of Silver TITLE Studii si cercetari fiz. Acad. RPR, 1958, ORIG. PUB. 9, #3, 379-387. Vigner-Seitz Method was employed for the calculation of cohesive energy of silver, while using Gaspar's Potential calculated ABSTRICT by means of a statistical method (RZKhim., 1955, #11, 20543). Cohesive energy, calculated from the experimental value of the ionization potential was 19.5 K cal/mole. Using theoretically obtained (Gaspar's) value of the ionization potential the cohesion energy was found to be 59.9 K cal/ The difference between these two values is due to the fact that Gaspar's Universal potential does not take into account the interaction between electrons. CARD: -- D. Belashchenko 1/1 B-5 GDR COUNTRY Physical Chemistry CATEGORY 81139 No. 23 1959, : RZKhim., No. ABS. JOUR. Witzmann, H.; Buhrow, J. AUTHOR Not Given Report on Temperature Dependance of Glow INST. TITLE Intensity of Inorganic Crystalline Luminophores. Z. phys. chem. (D.DR), 1959, 210, #1-2, ORIG. PUB. 97-101 Several empirical laws of the dependance of glow intensities of luminophores on tem-ABSTFACT perature were described and analyzed. following relationship was proposed for the core luminiscence in stationary conditions: $I/I_0 = \exp(-W_1/kT)/(1 + C_2 \exp(-W_2/kt))$, where $W_1 \ll W_2$ and I - glowing intensity at T, Io - maximum intensity, T - abs. temperature, k - Boltzman Constant, W1, W2 - activation energies and C2 is a constant. formula considers a possibility of coexistence of metastable state of the system with the activation energy W1. Formulae proposed CARD: by other authors have been analyzed.

.... You I'm

B-5 Czechoslovakia COUNTRY : Physical Chemistry CATEGORY ABS. JOUR. : RZKhim., No. 23 1959, No. 81146 Klikorka, Jiri; Machovec, Mojmir; Horak, Jaromir; AUTHOR Not Given INST. Spectral Transmission of Zinc Selenide. I. TITLE Thin Foils. Luminescence. II. The Character of Zinc Selenide Luminescence. Chem. listy, 1958, 52, #10, 1866-1871, ORIG. PUB. 1872-1876. I. The purest ZnSe (I) was obtained by a ABSTRACT direct synthesis of Zn and Se in a quartz tube, at 650°C and 2 x 10-2 mm Hg of pressure. Subsequent distillation in H2 atmosphere at 9500 yielded variously colored fractions containing different admixtures. The purest I was yellow and contained only traces of Cu and Fe. From this latter compound, at pressures of the order of 10-6 mm were prepared 0.7-0.9 A thick films. The dependence of transmissivity on the wave length in the latter films was studied. CARD: 1/2 * Celikovsky, Alex. B-5 COUNTRY GDR CATEGORY 81146 23 1959. No. : RZKhim., No. ABS. JOUR. ROHTUA INST. TITLE ORIG. PUB. For the separate fractions of distilled I ABSTRACT cathode luminescent intensity was studied and its dependence on wave length in the yellow and near red sections of the visible spectrum was determined. II. The relationship between the luminescent properties of ZnSe specimens and the duration of contact with different atmosphers (reducing, oxidizing, N2, vacuum) at various temperatures was studied. Possible disgruption of the lattice was discussed. A conclusion was made that Se-vacancies in a cubic lattice of ZDSe are the centers of luminescence. CARD:

Ç

2/2

-- A. Shteynberg

GDR COUNTRY

CATEGORY

B-5

81150

1959. No. ABS. JOUR. : RZKhim., No. 23

AUTHOR

: Wilke, K.-Th : Not given

INST. TITLE

Aluminum-Lithium-Arsenate. Phosphorescent

Nucleus of Arsenate.

ORIG. PUB.: Z. phys. Chem. (DDR), 1959, 210, #5-6, 260-264.

ABSTRACT

: The method of preparation and luminiscent properties of Mn activated Al-Li-arsenate were described. A phosphorescent body possessing high radiation intensity (up to 20% of Mg-Li-argenate intensity) is of the following composition: 6Alo03.6Li02=Aso05 (10-2 Mn) I. This compound may be easily excited by light of 365 m/s wave length. The light emission spectrum of I with Mn is composed of structural bands with the maxima occurring at 639, 645, 654, and 666 mg. It was observed that the components of the phosphorescent substance form a chemical

CARD: 1/2

COUNTRY

: GDR

B-5

CATEGORY

1959, No. : RZKhim., No. 23 ABS. JOUR.

81150

AUTHOR INST.

TITLE

ORIG. PUB.

ABSTRACT

: compound, which fact was further proved by X-ray analysis. Increasing the time and temperature of calcining of the phosphorescent substance led to the decrease of glow intensity which was caused by the evaporization of As. It was established that only a part of Mn is in 4-valent state. glow intensity of I falls sharply after a temperature of 200°C is reached. The sime The similarity of radiation spectra of Mg-arsenate, Mg-Li-arsenate and Al-Li arsenate and the presence of polyvalent Mn in the above phosphorescent substances indicates the structural similarity of the configurations

CARD:

adjacent to Mn atom.

COUNTRY GDR B-5

CATEGORY

ABS. JOUR.: RZKhim., No. 23 1959, No.

81156

AUTHOR

Peibst, H.; Lemke, H.

INST.

Not given

TITLE

Comparative Electrical and Optical Measurements of Natural Calcium fluoride Crystals.

ORIG. PUB. :

Z. phys, Chem. (DDR), 1958, 208, #3-4,

188-209.

ABSTRACT

The effects of temperature on the dark current, photocurrent, absorption spectrum thermolumentscent spectra (TL) and fluores-The curves of thercence (F) were studied. mal luminescence of natural, variously colored fluorites, from seven German deposits were presented. Absorption spectra of all specimens show a maximum at 340 mg and an elevation at 1 (280 mg. Green coloration was connected with the maxima at about 590 and 410 TL and F spectra were sharply different. F spectrum consisted of one broad band with a maximum between 425-430 m/k for all samples.

CARD:

1/3

GDR

B-5

COUNTRY CATEGORY

ABS. JOUR.

1959, No. : RZKhim., No. 23

81156

AUTHOR

INST.

TITLE

ORIG. PUB.

ABSTRACT

TL spectrum varied for different specimens and consisted of a series of narrow bands lying between 385 and 645 mg. It is assumed that the difference of TL and F spectra is caused by a difference in the nature of TL and F centers (TL centers are 3-valent ions while F centers consist of 2-valent Thermal glow ions of rare earth elements). curves (heating rate 0.35 deg./sec) display a single peak in the vicinity of 450-600°K for all specimens. The dependence of conductivity on temperature in the region of 450-600°K is for almost all specimens

CARD:

2/3

COUNTRY : GDR

CATEGORY :

ABS. JOUR.: RZKhim., No. 23 1959, No. 81156

AUTHOR : INST. : TITLE :

ORIG. PUB. :

ABSTRACT : well approximated by a straight line with

an inflection point in the coordinates of ln6~I/T. The photoconductivity exceeds dark conductivity by 2-5%. Thermal activation energies of F-centers calculated (1) from the maximum in the absorption band (about 400 mm), according to Pekar's theory,

B-5

(about 400 mg), according to Pekar's theory, (2) from the slope of the lines

in6 = f(1/T) and from the initial parts of the thermal incadescence curves, agree quite

closely (about 2.4 ev).

CARD: 3/3 -- Kh. Kyaembre

COUNTRY : GDR B-5

CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 81184

AUTHOR : Boer, K.W.; Kummel, U.; Ksoll, G.
INST. : Not given. c&S

TITLE : Dependence of Breakdown Voltage on Mono-

crystal Real Structure.

ORIG. PUB. : Z. phys. Chem. (DDR), 1959, 210, #3-4,

128-126.

ABSTRACT : It has been shown that upon heating of CdS

monocrystal (at the rate of 0.5°/l sec.) in vacuum (p<10-5 mm of Hg) above a certain minimum temperature (200-280°) and upon a subsequent rapid cooling of it to -150° its voltage breakdown was considerably lowered (by about 2 orders). Analogous treatment in oxygen atmosphere (heating to 200° and higher) caused an increase in voltage breakdown. Upon an increase of the minimum temperature of the process,

the voltage breakdown changed accordingly

CARD: 1/2

GDR COUNTRY

B-5

81184

CATEGORY

ABS. JOUR. : RZKhim., No. 23 1959, No.

AUTHOR INST.

TITLE

ORIG. PUB. :

(increased upon heating in 02 and decreased ABSTRACT in vacuum) and approached the limiting values

The limiting values for both cases differ by a factor of about 50. Analyzing the temperature-electrical conductivity curves, it was concluded that the above methods of treatment cause changes in the structure of excited energy levels in the forbidden zone. These changes do not, however, substantially influence the magnitude of voltage breakdown.

-- L. Andreyev

2/2 CARD:

: POLAND COUNTRY

B-5

CATLGORY

No. 23 1959, : RZKhim., No. ABS. JOUR.

81188

AUTHOR

: Stankowski, J.

INST. TITLI

: Not given : Non-Linear Effects in Rochelle Salt

ORIG. PUB.

: Bull. Acad. polon. sci. Ser. sci. math.,

ABSTRACT

astron. et phys., 1958, 6, #9, 599-602. The relationship between polarization polarization (P) and electrical field potential (E) for the Rochelle salt was studied in the temperature interval of 17-350 by means of dielectric hysteresis (DH). It has been found that for strong fields and at temperatures exceeding Curie point, P is a non-linear function of E. At 240 DH is already absent, which fact does not agree with Kosman's Data. (R. ZhKhim 1957, #5, 12142). Kosman obtained DH at temperature

greatly exceeding 240.

CARD:

-- Yu. Vekilov

B-5 Poland COUNTRY CATEGORY 81191 ABS. JOUR. : RZKhim., No. 23 1959, No. Rutkowska, Halina AUTHOR Not given INST. Relationship between the Structure of Barium-Ferrite Magnets and their Properties. TITLE Przegl. telekomun, 1958, 31, #8-9, 273-277. ORIG. PUB. : The relationship between the properties and ABSTRACT structure of barium ferrite magnets (Ba0.6Fe203) was studied. Ba0.6Fe203 structure was changed from fine to coarse grained by increasing the temperature of roasting from 1050° to 1350° or by increasing the time of reaction from 1/2 to 5 hours. Cal cining of Ba0.6Fe203 specimens was accomplished in N2, 02, N2 + 02 (1:1) or air atmost pheres. No strict relationship between the magnetic properties and structure of Ba0.6Fe202 was apparent. CARD: -- 0. Polotnyuk 1/1 B-5 GDR : COUNTRY CATEGORY 81192 1959, No. ABS. JOUR. : RZKhim., No. 23 Tertsch, H. ROHTUA Not given INST. : Crystal Growth TITLE : Tschermaks mineral. und petrogr. Mitt., ORIG. PUB. 1959, 7, #1-2, 106-114. : A survey of papers dealing with the mechanism of growth of ideal and real crystals. ABSTRACT Bibliography. 20 References. -- Yu. K

Bulgaria COUNTRY

CATEGORY

81194 1959, No. ABS. JOUR. : RZKhim., No. 23

Kirkova, El. AUTHOR Not given

INST. The Mechanism of (Methylene) Blue Incor-TITLE

poration into Lead and Barium Nitrate

B-5

3-5

__Ya. Slavnova

Crystals.

Godishnik Sofiysk Univ. Phys-mathem fac., ORIG. PUB.

1956-1957 (1958), 51, #3, 39-46. As a development of an earlier published ABSTRACT

work (RZKhim, 1958, #18, 60052) the supplementary experimental data useful in the explanation of the mechanism of methylene blue (1) incorporation into Pb(NO3)2 and Ba(NO3) crystals were published. Mechanisms of I's incorporation into the above crystals at various conditions of crystallization were studied. Quantitative incorporation data, as a function of I's concentration at 200 and at oversaturation (0.327) were obtained. I's adsorption isotherms on fine (0.075-0.3 mm) nitrile crystals were prepared. It was

CARD: 1/2

: Bulgaria COUNTRY

CATEGORY

81194 23 1959, No. : RZKhim., No. ABS. JOUR.

ROHTUA INST. TITLE

ORIG. PUB.

concluded that I's incorporation into both ABSTRACT Pb(NO3)2 and Ba(NO3)2 crystals follows the same mechanism, namely that of adsorption, considerably aided by the formation of moiecular aggregates. Selective incorporation of I into cubes and pyramid face was observed only for Pb(NO3)2, while it was absent in the case of Ba(NO3)2. It was concluded that I did not attach itself to Pb(NO3)2 crystals,

when monomer predominated in the solution, and attached itself to Ba(NO3)2 crystals when dimer was present in the solution.

CARD:

2/2

14

: Bulgaria

B-5

CATEGORY

ABS. JOUR. : RZKhim., No. 23 1959, No. 81195

AUTHOR

: Kirkova, E.; Milev, M.

INST.

Not given.

TITLE

The Effect of Crystallization Conditions on the Incorporation of Certain Admixtures

into Salt Crystals.

ORIG. PUB. :

Godishnik Sofiysk univ. Phys.-mathem. fac.,

1956-1957 (1958), 51, #3, 47-51.

ABSTRACT

In order to determine the crystallization procedure at which least amounts of nonisomorphic admixtures are incorporated into inorganic salt crystals the following systems were studied: Ba(NO3)2-methylene blue; Ba(NO3)2-K4 Fe(CN)6]; KCL-PbCl2 and KC104-BaSO4. Quantitative data on the admixture incorporation at different crystallization temperatures and oversaturations were obtained. It was established that incorporation of all studied admixtures depended to a large degree on crystallization conditions.

1/2 CARD:

COUNTRY

: Bulgaria

B-5

CATEGORY

ABS. JOUR.

1959, : RZKhim., No. 23

81195

AUTHOR

INST.

TITLE

ORIG. PUB.

ABSTRACT

: For the purest substances, crystallizations should be conducted possibly at higher temperatures and higher degrees of oversaturation.

__Ye. Slavnova

CARD: 2/2

Czechoslovakia

B-6

CATEGORY

Physical Chemistry. Gases. Liquids.

Amorphous Substances. 1959, No. ABS. JOUR. : RZKhim., No. 23

81218

AUTHOR INST.

Papousek, Dusan

: Not given

TITLE

A Study of Molecular Interaction in Liquids.

Association of Liquids.

ORIG. PUB.: Chem. Listy, 1958, 52, #10, 1845-1850.

ABSTRACT

: A method for the calculation of Energy of Association in Liquids, based on the empirical relationship between the surface tension or compressibility and potential energy volume density of the molecular interaction was proposed. The calculated values of association energy for several alcohols, ketones, nitriles and acids agreed well with those obtained by other methods. The obtained values of association energies of monpatomic aliphatic alcohols decreased with the increase of alkyl group size. Normal alcohols energies of association were higher than

CARD: 1/2

COUNTRY

: Czechoslovakia

B-6

CATEGORY

ABS. JOUR.

: RZKhim., No. 23 1959,

81218

AUTHOR INST.

TITLE

ORIG. PUB.

ABSTRACT

: those of the corresponding isomers. In the case of methanol, one may expect a complete association in the liquid phase hence the calculated value of the energy of association should be similar to the energy of the cor-The calculated responding hydrogen bond. of 6.27 K cal/mole agreed well with the commonly cited values for hydrogen bond energy in alcohols (6-6.2 K cal/mole). The deviation of calculated values from the true ones probably does not exceed 0.2 K cal/mole. Article III, see RZKhim, 1959, #10, 34101.

CARD:

-- K. Mayer

2/2

: GDR

B-6

CATEGORY

ABS. JOUR. : RZKhim., No. 23 1959, No.

81231

AUTHOR

: Szabo, P.

INST.

: Not given.

TITLE.

: Hard Paraffin Viscosity Measurements.

ORIG. PUB. : Kolloid-Zh, 1959, 163, #2, 141-142.

ABSTRACT

: Hard paraffin was forced through a capillary viscosimeter at a pressure differential of 140 kg/cm2. The relative viscosity n was calculated with the aid of Poiseuille's formula. n decreases from 3.7 x 109 poises at

26° to 3.41 x 103 poises at 48.3°.

-- A. Lichter

CARD: 1/1

COUNTRY

: Czechoslovakia

B-6

CATEGORY

ABS. JOUR.

1959, No. : RZKhim., No. 23

81237

AUTHOR

: Prokopova, H.; Vasko, A.

INST.

: Not given.

TITLE

: The Tranmissivity of Arsenic Glass in

the 15%-25% Range.

ORIG. PUB.

: Czechosl. Phys. Zk, 1959, 9, #2, 270.

ABSTRACT

: In the IR absorption spectra of arsenic glass (specimens were 0.98 mm thick), a transparency region with a maximum at 582 cm-l was found. The region terminates with a very intense absorption band, beyond which (ChOO cm-1) possibly lies another trans-

mitting region.

-- V. Kolesova

CARD: 1/1

B-7

Physical Chemistry. Radiochemistry. CATEGORY

Isotopes.

ABS. JOUR. : RZKhim., No. 23 1959, No.

81247

AUTHOR

Schmidt-Ott; Wolf-Dieter

INST.

Not given

TITLE

Electron, Positron and Y-Spectra of Cu614.

Z. Phys., 1959, 154, #3, 286-292. ORIG. PUB. :

The decay of Cu^{64} with $T_1 = 12.8$ hours was ABSTRACT

studied by means of a scintillating spectrometer. The threshold energies of and 65 ± 20 kev correspondingly. The decay chart of Cu64 was presented.

-- G. Sokolik

CARD: 1/1

COUNTRY

Hungary

B-7

CATEGORY

ABS. JOUR.

1959, No. : RZKhim., No. 23

81259

AUTHOR

T. Szilagyi Maria

INST. TITLE

Not given The Determination of Radioactive Isotope Purity by Means of Paper Chromatography

and Electrophoresis.

ORIG. PUB.

Magyar fiz. folyoirat, 1958, 6, #6,

565-572.

ABSTRACT

: No abstract.

CARD: //

COUNTRY Czechoslovakia B. 7

CATEGORY

ABS. JOUR.: RZKhim., No. 23 1959, No.

81271

AUTHOR

Drska, L.; Chudacek, I.; Sterba, F.

INST.

Not given

TITLE

Measurement of Some Neutron Spectra by

Means of Nuclear Emulsions.

ORIG. PUB.: Czechosl. Phys. Z., 1958, 8, #6, 648-657

ABSTRACT

: See R. ZKhim., 1959, #14, 48693.

CARD: 1/1

COUNTRY

: Czechoslovakia

B-8

CATEGORY

: Physical Chemistry. Thermodynamics.

Thermochemistry. Equilibria. Phase * RZKhim., No. 23 1959, No. 81283

ABS. JOUR.

AUTHOR

: Seha, Z.; Holub, R. : Not given

INST.

TITLE .

: Contributions of a Harmonic Oscillator to

the Thermodynamic Functions for One Degree

of Freedom.

ORIG. PUB.

: Czechosl. Chem. Communs, 1959, 24, #3,

991-1005

ABSTRACT

* See RZKhim., 1959, #16, 56329.

CARD: 1/1

Physico-chemical Analysis. Transitions.

: Czechoslovakia B-8 COUNTRY

CATEGORY

ABS. JOUR. : RZKhim., No. 23 1959, No. 81305

AUTHOR Seha, Z. Not given INST.

Analytical Dependence of the Heat of TITLE .

Vaporization on Temperature

ORIG. PUB. : Collect. Czechosl. Chem. Communs., 1959,

24, #3, 869-873

ABSTRACT See RZKhim., 1959, #16, 56351

GARD: 1/1

B-8 COUNTRY GDR

CATAGORY

: RZKhim., No. 23 1959, No. 81335 ABS. JOUR.

: Bittrich H. J.; Leibnitz E. AUTHOR

: Not given IMST.

: Investigation of the System Na+-Ca2+-OH--TITLE SOL -- HoO. III. The Ternary Systems.

: J. Prakt. Chem., 1959, 7, #56, 311-319. ORIG. PUB.

ABSTRACT

: The solubility of identical salt vapor ions at 0°, 25, 35, 50 and 80° in ternary systems forming the quaternary system:

Na+-Ca²⁺-OH--SO₄²-H₂O was investigated. In Na+-Ca²⁺-SO₄²-H₂O system at 25, 35 and 50° the minimum solubility of CaSO₄ is observed at 0.2 N concentration of Na2SO4 (Hill A.E., Wills J.H., J. Amer. Chem. Soc., 1938, 60, 1647). At 00, hydrates such as CaSO4 2H20

and Na2SOL 10H2O are stable in the solid phase. The results of a study of the system Na+-Ca²⁺-OH--H₂O agree with earlier obtained

CARD: 1/3

COUNTRY : GDR
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No.

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : results (D.Anselme A., Bull Soc. of France, 1903, 29, 936; Basset H., Chem. Soc. [London], 1934, 1270).

ESTRACT: results (D.Anselme A., Bull Soc. chim.
France, 1903, 29, 936; Basset H., Jr., J.
Chem. Soc. [London], 1934, 1270). No anion
complexes form in the system. Ca(0H)2 solubility in 2m is close to 0. The solubility of Nat-OH-SO42-H20, at 50-800,
studied previously in the temperature range

of 0-35° (Windmaisser F., Stöckl F., Montsh. Chem., 1950, 81, 543; Grube G.,

Elektrochem. angew. physik. Chem., 1938, 44, 640) was

explored presently. The experimental data of Ca2+-OH--SO42H2O system were different

2/3

CARD:

GOUNTRY : GDR B-8

CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 81335

AUTHOR : INST. : TITLE :

ORIG. PUB. :

abstract : from the literature data (Cameron F. K., Bell J. M., J. Amer. Chem. Soc., 1906, 28, 1220). No Ca(OH)2 solubility increase with the increase of Ca2SO4 concentration nor any formation of the double salts was observed. For the latter system, double point concentrations, equilibrium constants and enthalpies were calculated. The calculated values agreed well with the experimental and literature cited ones. The composition

of triple points in the system Na⁺-Ca²⁺OH⁻-SO_{1,} ²⁻-H₂O and their position in Lovenherz and Enke diagrams were considered.

Article II, see RZKhim, 1959, #11, 37845.

CARD:

B-8

81335

Rumania

B-8

CATEGORY

ABS. JOUR. : RZKhim., No. 23 1959, No. 81339

AUTHOR

Angelescu, E.; Popescu, G.

INST.

: Not given

TITLE

A Study of the System Glycerol-Diglycerol.

ORIG. PUB. :

Studii si cercetari chim. Acad. RPR, 1958,

6, #4, 607-618.

ABSTRACT

Density d and viscosity n of glycerol (I) and diglycerol (II) mixtures in the temperature range of 20-800 were determined, taking the readings 5°C apart. A negative deviation of d and from additivity rule was observed. The magnitude of a deviation from the additivity rule decreased with the increase of temperature. Maximum deviations from the additivity rule occurred in the same regions of mixture's concentrations corresponding to 30 mole % of II, independently of temperature. At low temperatures the largest

deviation of d from the additivity rule

CARD:

COUNTRY

: Rumania

B-8

CATEGORY

ABS. JOUR.

23 1959, No. : RZKhim., No.

81339

AUTHOR

INST.

TITLE

ORIG. PUB.

ABSTRACT

: occurred for the solutions containing 60 mole % of II. n variations in solutions of different concentrations were sufficiently great to permit the use of the above property for the analysis of the mixtures. The peculiarities of the system I-II, are explained by the fact that association and dissociation of the associated complexes occur simultaneously in the solution. The negative deviation of these properties from the additivity rule indicates the predominance of the dissociation process.

CARD:

2/2

-- V. Kogan

GDR

B-9

CATEGORY

Combustion. Physical Chemistry. Kinetics.

Catalysis. Topochemistry. Explosions. 1959, No.

ABS. JOUR.

azkhim., no. 23

81367

AUTHOR

Chatterji, A.C.; Mukherjee, S. K.

INSI.

Not given.

TITLE

Mechanism of Chromic Acid Oxidations. Part Temperature Coefficients of Oxidation Rates of Ethylene and Methylated Ethylene *

Z. phys. Chem. (DDR), 1959, 210, #3-4,

ORIG. PUB.

166-175.

ABSTRACT

The kinetics of ethylene-(I), propylene-(II), 2,3-butylene glycols (III) and pinacone (IV) exidation with chromic acid were studied at a constant ion concentration, in the solution, in the presence of HClO4, at 25-50°C. reaction rate increased from ICIICIIICIV. The energies of activation increased from II(I(III, IV. The entropy of activation changes were the same as the variations of reaction rates. CH2 groups increased the reaction rate due to their electron donor character. From I to IV the part played by

1/2 CARD:

* Glycols by Chromic Acids

COUNTRY

g GDR

B-9

CATEGORY

ABS. JOUR.

: RZKhim., No. 23 1959, No.

81367

ROHTUA

INST.

TITLE

ORIG. PUB.

ABSTRACT

the rupture of O-H bond increased as compared with that of C-H bond. Apparently the glycols form ethers upon their reaction with the chromic acid. Part VIII, see RZKhim, 1959, #1, 457.

-- A. Revzin

CARD: 2/2

B-9 GDR COUNTRY CATEGORY ABS. JOUR. : RZKhim., No. 23 1959, No. 81370 Seel, F.; Degener, E.; Knorre, H. AUTHOR Not given. Stoichiometry and Kinetics of the Exchange INST. TITLE of Hydroxyl-amino-N-sulfonates with Hydrogen Sulfide. Z. anorg. und allgem. chem., 1959, 299, ORIG. PUB. : #3-4, 122-137. The kinetics of K-hydroxylamino-N-mono (I)-or disulfonates (II) reaction with NaHSO3 were ABSTRACT studied at 25-60° at solutions ionic strength of LO, while varying the acidity and concentration of Freactants. The reaction rate follows a second order equation and is independent of acetate or sulfate buffer concentration. For I and II the activation energies were 24.5 and 18 Kcal/mole and preexponents were 12.1015 and 4.3.1011 The reaction leads to the formation of 70% of imidosulfonate or nitrido-trisulfonate and 30% of amidosulfonate or imidosulfonate CARD: 1/2 B-9 GDR COUNTRY CATEGORY 1959, No. 81370 : RZKhim., No. 23 ABS. JOUR. AUTHOR INST. TITLE ORIG. PUB. from I or II correspondingly. This ratio is independent of the temperature and ABSTRACT HS03 and S032 concentrations. authors believe that the reaction proceeds via rate limiting formation of hydroxylamino 6-sulfonates. The regrouping or hydrolysis of the latter determines which of the two

-- A. Revzin

CARD: 2/2

courses the reaction takes.

COUNTRY : Czechsoslovakia B-9

CATEGORY

ABS. JOUR. : RZKhim., No. 23 1959, No. 81371

AUTHOR Zahradnik R.; Zuman, P.

Not given INST.

Carbaminate, Monothiccarbaminates and Dithic-TITLE

carbaminates. VIII. Polarographic Studies of the Kinetics and Mechanism of Dithio- *

Collect. Czechosl. Chem. Communs., 1959, 24, #4, 1132-1145. ORIG. PUB.

ABSTRACT See RZKhim, 1958, #23, 76707.

CARD: 1/1

carbaminic Acids Decomposition in the Acid Medium

: Czechoslovakia COUNTRY B.-9

CATEGORY

ABS. JOUR. : RZKhim., No. 23 1959, No. 81409

: Rozsival, M.; Bergstein, A. AUTHOR

INST. : Not given.

: Thermal Decomposition of MnCO3. TITLI II. Electron Microscope Studies.

ORIG. PUB. : Collect. Czechosl. Chem. Communs, 1959

24, 料, 1195-1199

ABSTRACT See RZKhim, 1959, #10, 34011.

CARD: 1/1

: Czechoslovakia B-9 COUNTRY

CATEGORY

81414 23 1959, No. ABS. JOUR. : RZKhim., No.

: Brezina, B. AUTHOR Not given INST.

A Study of the Reaction Between Equimolar TITLE Mixtures of Barium Carbonate and Different

Varieties of Titanium Dioxides.

: Collect. Czechosl. Chem. Communs, 1959, ORIG. PUB.

24, #4, 1206-1233.

: See RZKhim, 1958, #11, 35468. ABSTRACT

1/1 CARD:

B-9 : Czechoslovakia COUNTRY

CATEGORY

23 1959, No. 81432 : RZKhim., No. ABS. JOUR.

: Landa, S.; Weisser, O.; Mostecky, J. AUTHOR

: Not given INST.

: Properties of Sulfide Catalysts. VI. TITLE

Dehydrating and Dehydrogenating Properties of Molybdenum and Tungsten Disulfides.

: Collect. Czechosl. Chem. Communs, 1959, 24, #4, 1036-1044. ORIG. PUB.

: See RZKhim, 1959, #1, 513. ABSTRACT

CARD: 1/1

Ozechoslovakia COUNTRY

Physical Chemistry. Radiation Chemistry. CATEGORY

Photochemistry. Theory of the Photographic * ABS. JOUR. : RZKhim., No. 23 1959, No. 81460

: Bednar, J. AUTHOR : Not given

Effect of Monovalent Thallium Ions on the X-Ray Reduction of Fe³⁺. INST.

TITLE

Collect. Czechosl. Chem. Communs, 1959, 24, ORIG. PUB. :

#3, 1006-1007.

See RZKhim, 1959, #5, 14716 ABSTRACT

CARD: 1/1

Process

COUNTRY CATEGORY

1959, ABS. JOUR. : RZKhim., No. No.

AUTHOR

INST.

TITLE

ORIG. PUB.

ABSTRACT

CARD:

: Czechoslovakia COUNTRY

CATEGORY

81461 ABS. JOUR. : RZKhim., No. 23 1959, No.

B-10

: Spurny Z. : Not Given AUTHOR INST.

Wriations of Fe2+ Concentration Upon the TITLE Solution. Irradiation of Its 411

ORIG. PUB. : Collect. Czechosl. Chem. Communs, 1959,

24, #3, 1010-1011

: See RZKhim, 1959, #5, 14715. ABSTRACT

CARD: 1/1

: Czechoslovakia

: Physical Chemistry. Theory of Acids and COUNTRY CATEGORY

Bases. : RZKhim., No. 23 1959, No. 81491 ABS. JOUR.

: Fried V.; Hala E.; Pick J. ROHTUA

: Not given. : Viscosity of the Nonelectrolytic Solutions. INST. TITLE

: Collect. Czechosl. Chem. Communs, 1959, 24, #2, 400-404. ORIG. PUB.

: See RZKhim, 1959, #12, 41572. ABSTRACT

CARD: 1/1

HUNGARY B-12 COUNTRY CATEGORY Physical Chemistry. Electrochemistry.

ABS. JOUR. : RZKhim., No. 23 1959, No. 81510

Suryanarayana C.V.; Venkatesan V. K. AUTHOR

Not given INST. Electrical Conductance of Concentrated TITLE

Solutions of Strong Electrolytes

Acta chim. Acad. scient. hung., 1958, ORIG. PUB. :

17, #3, 327-352.

A new equation relating the electrical ABSTRACT conductance Ac in concentrated solutions

of the strong electrolytes to the concentration was proposed: $\lambda c = \frac{h_s}{h_s} + \frac{A(1 - C_p)}{h_p}$, where Nc is specific conductance x 1000/Cp,

 \mathtt{C}_{D} - mole ratio of the substance in the given solution to that present in the saturated solution at the same temperature. (concentration potential), np - ratio of given concentration viscosity— μ to that in the saturated solution, λ_s - λ_c of the saturated solution and Λ - a function of

temperature and dielectric constant of the

CARD:

B-12 COUNTRY : Hungary

GATEGORY

: RZKhim., No. 23 1959, No. 81510 ABS. JOUR.

ROHTUA INST. TITLE

ORIG. PUB.

: solution. The validity of the above ABSTRACT

equation was proved by the behavior of concentrated aqueous solutions of NeCl, KCl, NaNO3, KNO3 (from 1M to saturated solutions), at 30-550 (author's data), as well as by the behavior of aqueous solutions of NHL, NO3 (34M), AgNO3 and water-methanol solutions of LiNO3 (literature data).

-- R. Lazorenko Manevich

CARD: 2/2

B-12 GDR COUNTRY CATEGORY

81526 ABS. JOUR. : RZKhim., No. 23 1959, No.

: Milicka, L. AUTHOR : Not Given INST.

: Electrostenolysis, Disturbance of Electrical TITLE Equilibrium and Ion Evolution on the Current

Conducting Membranes.

ORIG. PUB. : Z. phys. Chem. (DDR), 1959, 210, #1-2, 23-34.

: The essence of the phenomena of electro-ABSTRACT stenolysis, disturbance of electrical equi-librium of the solution and ion evolution on the inorganic and organic membranes (or diaphragms), contained in the electrolytes through which DC current is passed, was The basic postulates of the discussed. previously proposed theory of the above phenomena, developed by the author were described (RZKhim, 1958, #9, 28126). The state of the above phenomena, developed by the author were described (RZKhim, 1958, #9, 28126). liberation of Ag from AgNO2 solutions, I2

from KI solutions, and H2SO4 from K2SO4 solutions on colloidal membranes, situated

in the cells between the cathode and anode, CARD:

1/2

B-12 : GDR COUNTRY CATEGORY

81526 : RZKhim., No. 23 1959, ABS. JOUR.

AUTHOR INST. TITLE

ORIG. PUB.

: upon the passage of DC current through the solution was studied. Drawing of the equip-ABSTRACT ment, in which one may (according to the author) observe the formation of I2 from KI at the boundary of the two directly adjacent solutions of KI and KCl (without a membrane), upon the passage of the current through the cell, was shown. The results of the described experiments are considered as a proof of author's representation of the mechanism of electrostenolysis. ing to this idea, the membranes contained in the electrolyte, through which DC current CARD:

passes, are considered as bipolar electrodes. -- N. Khomutov

: Hungary

B-12

CATEGORY

ABS. JOUR. : RZKhim., No. 23 1959, No.

81529

AUTHOR

: Cseh, I.; Balog, J.; Kiss, L.; Paulik, I.

INST.

: Not given

TITLE

: Effect of the Temperature on Dissolution of

Zinc in the Diluted Solutions of Acids.

ORIG. PUB. : Acta phys. et chem. Szeged, 1958, 4, #3-4,

107-115.

ABSTRACT

: The effect of temperature on the rate of dissolution of zinc-plates (RZKhim, 1958, #22, 73402; 1959, #5, 14778) in 0.001, 0.005 and 0.0 N solutions of HCl, H2SO4 and citric acid at 5, 15 and 25°C (stirring) The amounts of dissolved zinc was studied. were determined by polarographic means. results were tabulated and plotted on graphs (amounts of dissolved zinc vs time). dissolution rate constants and the corresponding temperature coefficients were calculated.

CARD: 1/1 -- M. Pospelov

COUNTRY

: Czechoslovakia

B-12

CATEGORY

ABS. JOUR.

: RZKhim., No. 23 1959, No. 81546

AUTHOR INST.

: Weber, Jan

: Not given.

TITLE

: Polarographic Currents with Periodically Alternating Voltage. II. Theoretical

Considerations of Current during Regeneration

: Chem. Listy, 1958, 52, #10, 1888-1898. ORIG. PUB.

ABSTRACT

: A derivation of instantaneous current equation for the electrode reaction, in which the depolarizer is chemically regenerated from the products of electrode reaction was The calculations were performed presented. for the depolarization process in the ideally reversible redox system using flat electrodes, stationary drop electrodes, and drop electrodes with surfaces growing upon an arbitrary periodic variation of voltage with the time. These general equations were adapted, also for the case of periodically

CARD: 1/2

of the Depolarizer by Means of Chemical tion in the Solu

B-13 Czechoslovakia COUNTRY CATEGORY 81546 ABS. JOUR. : RZKhim., No. 23 1959, No. AUTHOR INST. TITLE ORIG. PUB. Equations for the alternating voltage. ABSTRACT instantaneous current on flat and spherical electrodes as well as for steady state current were presented. In the case of stationary, spherical electrodes, the magnitude of the current on the stationary spherical electrode is independent of frequency of rectangularly applied voltage. This magnitude depends simply on the rate constant of Special cases, when the chemical reaction. a strong reducing or oxidizing agent is present in the solution were considered. Article I, see RZKhim, 1956, #21, 68014. CARD: -- P. Zuman 2/2 B-12 : Czechoslovakia COUNTRY CATEGORY 81548 : RZKhim., No. 23 1959, ABS. JOUR. : Vodehnal, Josef; Marhol, Milan AUTHOR Not given : Investigation of the Speed with which INST. Equilibrium is Attained during the Polaro-TITLE graphic Exchange Reaction in Strongly Acid * Collect. Czechosl. Chem. Communs, 1959, ORIG. PUB. 24, #4, 1281-1286. : The rate of cation exchange in strongly ABSTRACT acid cationites was investigated by polarographic means-automatic registration of Žn2+ wave height decrease. To that end was used a large polarographic vessel (about 400 ml), equipped with a stirrer, and a protected mercury drop electrode. case of rapid reactions the decrease of Zn2+ content in the solution was measured by the registration of wave height change vs time at constant voltage. Registration of total wave over longer periods of time was resorted to in the case of slow reactions CARD: -- 0. Knessl 1/1 Cetionites

COUNTRY: Hungary B-12

CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 81555

AUTHOR : Jambor Bela INST: Not given

INST. : Not given : Newest Investigations of the Polargraphy of

Triphenyltetrazole Chloride

ORIG. PUB. : Magyar tud. akad. Kem. tud. oszt. kozl.,

1958, 10, #4, 409-416.

ABSTRACT: Triphenylformazane (I) gives rise to an oxidizing anodic wave, independent of the

impurities in the basic solution. I forms upon a cathodic reduction of triphenyltetrazole chloride (II). I's yield depends on the voltage, pH and the concentration of II. The observed 4-electron wave corresponds to the overlapping of several stages. Upon the reduction of II in acid medium, a colorless product different from I was obtained. The same product was observed on

disproportionation of II, when irradiated with light. The type of relationship

CARD:

1/2

COUNTRY : Hungary B-12

CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 81555

AUTHOR INST. ITTLE

ORIG. PUB.

ABSTRACT

: (E1, pH) for alcohol solutions is different from that for aqueous solutions. In order to make any conclusions from this relationship in regard to the proton participation in the electrode process of II reduction, caution must be exercised. See also RZKhim, 1959, #1, 588.

-- S. Rosenfeld

CARD: 2/2

COUNTRY CATEGORY

B-13 Czechoslovakia Surface Phenomena. Physical Chemistry.

Adsorption. Chromatography. Ion Exchange.

ABS. JOUR. : RZKhim., No. 23 1959, No. 81577

AUTHOR

Brodsky Jan; Zmitko Jiri

Not given.

INST. TITLE

Treatment and Properties of Diatomaceous Earth, used as a Carrier in Gas or Liquid

Chromatography.

Chem. Listy, 1958, 52, #10, 2012-2013. ORIG. PUB. :

ABSTRACT

The preparation of treated diatomaceous earth (I) (Kisselghur SK) used in gas chromatography was described. Technical grade diatomaceous earth was wetted with distilled water, dried, calcined for 1 hour at 500-5500, ground and classified. The wetability with liquids commonly used as a stationary phase was tested. It was found that up to 25% of liquid may be incorporated into I. The above method may be used to obtain I with any desired particle size.

1/1 CARD:

-- Karel Setinek

COUNTRY

: Poland

B-13

CATEGORY

ABS. JOUR.

No. : RZKhim., No. 23 1959,

81586

ROHTUA

: Blaszowska, Zofia; Dybczynski, Rajmund

INST. TITLE : Not given.

Characteristics and Evaluation of Strongly I. Methods of Evalua-Alkaline Anionites.

tion of Ion Exchange Capacity.

ORIG. PUB.

: Przem. chem. 1959, 38, #3, 168-175.

ABSTRACT

: Four methods for the determination of ion exchange capacity of strongly alkaline anionites (An) were described. Two of them

utilized column titration, and were based on the determination, upon filtration from 1 N, of the quantities of anions, desorbed from the layer of An, of the quantities obtained from the reactions AnCl + NaOH-AnoH + Na2CO3 + H2O. The remaining two methods were based on the potentiometric titration of OH-form with the An solution of HCl and Cl-form with a solution of

CARD: 1/2

COUNTRY CATEGORY : Poland

B-13

ABS. JOUR. : RZKhim., No. 23 1959, No.

81586

AUTHOR INST. TITLE

ORIG. PUB.

ABSTRACT

AgNO2. The above methods were used to study the polyfunctionality of An. It was observed that weak alkali group content in "Amberlite IRA-400" and in "Levatite MN" did not exceed 5-10%. "Levatite MP" and "Vofatite L-160" contained more than 70% of such groups.

-- G. YELKin

CARD: 2/2

COUNTRY CATEGORY

ABS, JOUR.

RZKhim., No.

1959, No.

AUTHOR INST. TITLE

ORIG. PUB.

ABSTRACT

CARD:

COUNTRY: GDR C CATEGORY: Inorganic Chemistry. Complex Compounds

ABS. JOUR. : RZKhim., No. 23 1959, No. 81629

AUTHOR : Jander, G.; Swart, K.-H.

AUTHOR : Jander, G.; Swart, A.-INST. : -

TITLE : Molten Antimony Trichloride as an Ionizing

"Water-Like" Solvent

ORIG. PUB.: Z. anorgan. und allgem. Chem., 1959, 299,

No 5-6, 252-270

ABSTRACT: Well-soluble in molten SbCl3 (I) are MCl, where M=K, Rb, Cs, NH₄, Tl, SbO, [(CH₃)_LN]

where M = K, Rb, Cs, NH_1 , Tl, Sbo, $[(CH_3)_1N]$ (II), $[(C_2H_5)_4N]$ $[(C_6H_5)_3C]$ (III) and $[C_6H_5]$ NH_3 , as well as $HgCl_2$, $AlCl_2$, $TeCl_2$, $SeCl_2$,

СН3СООК, Hg(СН3СОО)2, Sb(СН3СОО)3 (IV), [(СН3)4N]2SO4, KF, SbF3, [(СН3)4N]СІО4, КВг,

NH_UBr, HgBr₂, KI, HgI₂, I₂, Sb₂O₃, As₂S₃ and S. Difficultly soluble in I are Lich, Nach,

SnCl2, FeCl3, BiCl3; insoluble are CuCl,

CARD:

1/7

COUNTRY : CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 81629

AUTHOR :

TITLE

ORIG. PUB.

ABSTRACT cont'd

: AgCl, MCl₂, where M = Ca, Sr, Ba, Zn, Cd, Pb, Mn, Co, Ni and Hg₂; CrCl₃, M₂SO_{l4}, where M = Na, K and NH₁, MSO_{l4}, where M = Mg, Ba and Zn, Sb₂-(SO_{l4})₃, MS, where M = Zn, Cu, Hg and Pb; KClO_{l4}, KCN, K₂CrO_{l4}, MO, where M = Mg, Ca, Zn, Mn and Pb; Al₂O₃ and AgClO_{l4}. Under the action of I upon MNO₃, where M = K, Na and Ag, and NaNO₂, the liberation of oxides of N takes place,

CARD:

COUNTRY CATEGORY ABS. JOUR.: RZKhim., No. 23 1959, No. 81629 AUTHOR INST. TITLE ORIG. PUB. : ABSTRACT and under action upon M2CO3, where M=K, Li, cont'd and Na, and MCO3, where M=Mg, Ba, Zn, Mn and Pb, the liberation of CO2 occurs; LiClO1 is also subject to decomposition. A survey of known solvates containing I is given; the following crystallosolvates were obtained: 2[(CH_3)_LN]₂SO_L·3I, 2[(CH_3)_LN][Sb(SO_L)₂]·I, KF·2I, 2TlCl·I, 2KCl·I, 2NH_LCl·I and SbOCl·I; the last 5 solvates were prepared by crystal-3/7CARD: C COUNTRY CATEGORY : RZKhim., No. 23 1959, No. 81629 ABS. JOUR. AUTHOR INST. TITLE ORIG. PUB. ABSTRACT : lization of solutions of corresponding comcont'd pounds in I, extraction of the excess of I in the Soxhlet apparatus by the action of CSo, and drying of the product in vacuum over silica gel. There are also solvates well soluble in CS2. Dissociation of I takes place according to the equation (x+1)SbCl3 == ₹SbCl2++Cl •xSbCl3; the substances whose

dissolution increases the concentrations of

CARD:

COUNTRY CATEGORY ABS. JOUR. : RZKhim., No. 23 1959, No. 81629 AUTHOR INST. TITLE ORIG. PUB. : ABSTRACT the ions SbClot or Cl, are considered as cont'd analogs of acids and, correspondingly, of bases. The specific conductivity, %, of I at 98.5° is of the order of 10-6 ohm-1cm-1; for solutions in I, 1/2 increases by many orders. The dependence of Wand mol. electroconductivity of solutions in I on the concentration was explored. From among MCl, the strongest "base" is II. The low X of Sbock is ascribed to its considerable association CARD: 5/7 C COUNTRY CATEGORY : RZKhim., No. 23 1959, No. 81629 ABS. JOUR. AUTHOR INST. TITLE ORIG. PUB. ABSTRACT in conc. solutions. The "acids" are (in the order of decrease of their acid properties): cont'd AlCl3, [SbCl2] ClOu, SeClu, TeClu, SbCl5, as well as FeCl3. The van't Hoff coefficients of a series of substances dissolved in I at different concentrations were measured cryoscopically. Completely dissociated at all

concentrations were III (i= 2) and at c < 0.01 mole/1 of II. For IV, i=3, although κ is

CARD: 6/7

COUNTRY CATEGORY

ABS. JOUR.: RZKhim., No.23 1959, No. 81629

AUTHOR INST.

TITLE

ORIG. PUB.

ABSTRACT cont'd

very low. This is explained by the reaction $IV+2I \rightarrow 3SbCl_2(CH_3COO)$ (V) and by the small dissociation of V. It was demonstrated that I is a "water-like" solvent (Jander, G., Die Chemie in wasserähnlichen Lösungsmitteln.

Berlin, 1949).-- I. Ryss

CARD:

7/7

COUNTRY CATEGORY

: Inorganic Chemistry. Complex Compounds

ABS. JOUR. : RZKhim., No. 23

1959, No. 81678

AUTHOR

: Malik Wahid U.; Rahman S.M. Fazlur; Ali S. Anwar

INST. TITLE

: Studies on the Behavior of Cuprous Chloride in Hydrochloric Acid and Potassium Chloride Solutions. I. Chemical Analysis in the*

ORIG. PUB.

: Z. anorgan. und allgem. Chem., 1959, 299,

No 5-6, 322-327

ABSTRACT

: From the changes in the composition of solutions containing CuCl and HCl, diluted before the separation of GuCl deposit, the compositions of moist deposits were evaluated; in the authors opinion, the obtained data point to the formation of H2CuCl3 and H3CuCl4 in the solution and in the deposit. By an analogous

*Aqueous Phase

CARD:

C

COUNTRY CATEGORY

1959, No. 81678 ABS. JOUR. : RZKhim., No. 23

AUTHOR INST. TITLE

ORIG. PUB. :

method, the system CuCl-KCl-H2O was studied, ABSTRACT in which K3CuCl4 and K2CuCl3 are formed in cont'd

the solution and KCuCl2 and K2CuCl3 in the

deposit .-- I. Ryss

CARD:

2/2

COUNTRY CATEGORY

: Inorganic Chemistry. Complex Compounds

ABS. JOUR.

No. 81684 1959, : RZKhim., No. 23

AUTHOR

: Schäfer, H.; Dohmann, K.-D.

INST.

: On the Chemistry of the Elements Niobium and TITLE Tantalum. XX. On the Reaction 11Nb + 3SiO2 =

6NbO+ Nb5Si3

ORIG. PUB.

: Z. anorgan. und allgem. Chem., 1959, 299,

No 3-4, 197-202

ABSTRACT

: Upon heating the powder of metallic No in a quartz ampoule during 4-10 days at 800-10000, a mixture of NbO and NbgSi3 is formed, identified by chemical analysis and powdergrams [sic7. If, during heating, the ampoule is connected with the working diffusion pump, then the formation of silicide is not observed. The authors consider that the transfer of Si from the walls of the ampoule to the

CARD:

COUNTRY CATEGORY ABS. JOUR.: RZKhim., No. 23 1959, No. 81684 AUTHOR INST. TITLE ORIG. PUB. : ABSTRACT weighed portion is brought about by the forcont'd mation of gasiform SiO by means of the admixture of 0.002% H in metallic niobium according to the reaction: $SiO_2(solid) + H_2 = SiO$ (gas)+H20. Then, SiO2, H20 and Nb react to form NbcSia. The over-all equation of the reaction is: $11Nb + 35i0_2 = 6Nb0 + Nb55i_3$; the calculated enthalpy of the formation of Nb5-Siz is equal to $\triangle H \leftarrow -25$ kcal. Upon heating CARD: 2/3 C COUNTRY CATEGORY No. 81684 : RZKhim., No. 23 1959, ABS. JOUR. AUTHOR INST. TITLE ORIG. PUB. : metallic Ti in the quartz ampoule in the pre-ABSTRACT sence of TiCl3 at 1200°, a transfer of the cont'd metal is observed, resulting from the reaction $Ti(solid) + 2TiCl_3(gas) = 3TiCl_2(gas)$, and on the walls a deposit of oxide and silicide of titanium is formed. Part XVIII, RZh-Khim., 1958, No 19, No 63668.-- I. Slonim

C-A

3/3

CARD: #1015

COUNTRY HUNGARY Cosmochemistry. Geochemistry. Hydrochemistry CATEGORY ABS. JOUR.: RZKhim., No. 23 1959, No. 81697 Kliburszky, B. AUTHOR Hungarian Academy of Sciences INST. Physical Basis for Evaluation of Geochemical TITLE Potentials Acta geol. Acad. scient. hung., 1958, 5, No. ORIG. PUB. : 3-4, 313-321 Two terms used in geochemistry, namely, "compound potential" of Szadeczky-Kardoss and ABSTRACT "redox potential" of Goldschmidt, have been discussed. The existence of the first term is considered to be justified? Regarding the "redox potential," under complex geological conditions this concept becomes unreal to a certain extent, but may also be considered as justified since it reflects the relationship which existed in the surrounding *since it has a definite meaning CARD: 1/2 D COUNTRY CATEGORY 1959, No. 81697 ABS. JOUR. : RZKhim., No. 23 AUTHOR INST. TITLE ORIG. PUB.

OARD: 2/2

ABSTRACT

cont'd

processes .-- N. Berling

: environment at the time of the formation of

the rock and fixes the subsequent secondary

COUNTRY CATEGORY HUNGARY

Cosmochemistry. Geochemistry. Hydrochemistry

D

ABS. JOUR. : AZKhim., No.23

1959, iio. 81698

AUTHOR

Grasselly, G.

INST.

Hungarian Academy of Sciences

TITLE

Variability of the Complex Anion Potential in Anisodesmic and Mesodesmic Structures

ORIG. PUB. :

Acta geol. Acad. scient. hung., 1958, 5,

No 3-4, 293-311

ABSTRACT

Complex anion potentials, even in the case of the same anion, cannot be considered as values having a stable character. In anisodesmic structures, the variation of these values mainly depends upon possible changes in the ionic distances. From the point of view of evaluation of the potential of the connection or energy of the lattice, it is necessary to distinguish the physically considered complex anions from the hard crys-

CARD:

1/2

COUNTRY CATEGORY

ABS. JOUR.

: RZKhim., No. 23 1959, No. 81698

AUTHOR

INST.

TITLE

ORIG. PUB.

ASSTRACT cont'd

: talline lattice and anions interpreted only formally in terms of the geometry. In the silicates of mesodesmic structure, the complex anion potential changes together with variations of ionic distance, but the change of the former is most essential. From mesosilicates to tectosilicates, the values of complex anion potentials decrease in relation to structural type and degree of silification.

-- N. Berling

CARD:

COUNTRY -HUNGARY

Cosmochemistry. Geochemistry. Hydrochemistry CATEGORY

ABS. JOUR. : RZKhim., No. 23 1959, No. 81700

Ovehinnikov, L. N. AUTHOR

Hungarian Academy of Sciences INST.

Experimental Study of the Processes of Ore TITLE

Genesis

Acta geol. Acad. scient. hung., 1958, 5, ORIG. PUB. :

No 3-4, 337-350

The significance of the filtration effect in ABSTRACT

the formation of ore deposits and its dependence upon the radii of hydrated ions is discussed. See also RZhKhim., 1959, No 18,

No 63982.-- R. Rafaliskiy

1/1 CARD:

: POLAND COUNTRY

: Cosmochemistry. Geochemistry. Hydrochemistry CATEGORY

Mo. 81707 1959. : RZKhim., No. 23 ABS. JOUR.

: Osika, R. AUTHOR : Polish Geological Institute

INST. : Deposits and Prospects of Search for Iron TITLE

Ores in Poland

: Biul. Inst. geol., 1958, No 126, 9-55 ORIG. PUB.

: Three genetic types of deposits - sedimentary, ABSTRACT

erosion zone and magmatic - are described. The prospecting work conducted is based on geochemical and geophysical data .-- G. Vorob!-

yev

1/1 CARD:

HUNGARY COUNTRY

Cosmochemistry. Geochemistry. Hydrochemistry CATEGORY

1959, No. 81710 ABS. JOUR. : RZKhim., No.23

AUTHOR

Cseh Nemeth, J.

INST.

TITLE

Facies of Manganese Ore Deposits in Urkuti

Foldt. kozlony, 1958, 88, No 4, 399-415 ORIG. PUB. :

ABSTRACT

In the western part, the manganese deposits principally consist of the carbonates of Mn; in the eastern part, oxides of Mn predominate, and on the eastern border alluvial deposits are widespread. In the process of elteration of the rocks of the metal-bearing horizon, the carbonates of Mn were subjected to oxidation which was taking place at different speeds and was accompanied by the formation of different structures. As a re-

D

"in the center and

CARD:

1/2

COUNTRY CATEGORY

: RZKhim., No. 23 - 1959, No. 81710 ABS. JOUR.

AUTHOR INST. TITLE

ORIG. PUB.

ABSTRACT cont'd

: sult of the translocation of a considerable part of the altered rocks, the following facies appeared: a) oxides of Mn on the site of the original formation; b) translocated oxides of Mn of clastic and clayey type; c) horizon of decomposed ore (silica fragments with brown and red clay); d) alluvial deposits from oxides of Mn. Numerous chemical analyses of ores are cited .-- R. Shereshevskaya

CARD:

COUNTRY BULGARIA

Cosmochemistry. Geochemistry. Hydrochemistry CATEGORY

ABS. JOUR.: RZKhim., No. 23 1959, No. 81741

Barska, S. AUTHOR

Sofia University, Biological-Geological-INST.

Vermiculite from Krumovograd TITLE

Godishnik Sofiysk. un-t. Biol.-geol.-geogr. ORIG. PUB. :

fak., 1956-1957 (1958), 51, No 2, 133-140

Streaks of micaceous mineral, vermiculite, were ABSTRACT

discovered in an asbestos mine among actinolite and talcum. Chemical composition, according to three analyses, is (in %): SiO2 33.17-52.83, TiO2 0.07-0.44, Al203 10.28-18.39, Fe₂O₃ 3.84-11.81, Fe₀ 0.67-1.50, Mg₀ 15.18-24.24, CaO 0.10-2.56, Na2O 0.38-0.64, K20 0.06-0.72, H20* 8.20-8.97, H20* 8.59-

D

*Geographical Faculty

1/2 GARD:

COUNTRY

CATEGORY

: RZKhim., No. 23 1959, No. 81741 ABS. JOUR.

AUTHOR INST.

TITLE

ORIG. PUB.

:12.13. Crystallo-optical and thermal analyses ABSTRACT were effected. The characteristics of the cont'd chemism of the mineral are discussed .-- G.

Volkov

2/2 CARD:

COUNTRY

POLAND

CATEGORY

Cosmochemistry. Geochemistry. Hydrochemistry

1959, No. 81749

ABS. JOUR. : RZKhim., No.23

AUTHOR

Wieser, T.

INST.

TITLE

Petrographical Characteristics of Albitophyre and Porphyries and of Diabase from

Mrzyglod in Zawiercie Region

ORIG. PUB.

Kwart. geol., 1957, 1, No 1, 113-125, 216

ABSTRACT

According to the data of petrographical and chemical analyses, the igneous rocks revealed by bore holes were found to be greatly changed by the subsequent hydrothermal processes. Chemical changes were expressed by albitization, propylitization and calciti-

zation .-- G. Vorob'yev

CaRD:

1/1

COUNTRY CATEGORY : CZECHOSLOVAKIA

: Cosmochemistry. Geochemistry. Hydrochemistry

ABS. JOUR.

: RZKhim. No. 23

1959. No. 81751

AUTHOR

: Grenar, A.

INST.

: Slovak Academy of Sciences

TITLE

: Mineralogical and Petrographical Study of Pegmatites in Krizenci and Its Nearest

Surroundings (Czechoslovakia)

ORIG. PUB.

: Geol. prace. SAV. Zpravy, 1958, No 13, 74-96

ABSTRACT

: Various types of pegmatites differing in their structure, texture, mineralogical composition and certain geochemical characteristics were distinguished. A geochemical diagram for identifying minerals was compiled. The formation of pegmatites is considered from the point of view of theories set out in the works of A. A. Beus (see NZhGeo., 1955, No 3, No 2994). -- R. Khmel 'nitskiy

CARD:

COUNTRY

Cosmochemistry. Geochemistry. Hydrochemistry CATEGORY

1959, No. 81762 : RZKhim., No. 23 ABS. JOUR.

AUTHOR Bautsch, H.-J.

INST.

TITLE On the Genesis of Asbestos of Klettigshammor

(Thuringen)

Geologie, 1959, 8, No 2, 149-158 ORIG. PUB. :

Actinolite asbestos in paleopicrite is regarded as a product of regional metamorphism. ABSTRACT

The formation of actinolite was due to the action of magmatic intrusions, probably in the Sudeten phase of folding, and was accompanied by the loss of water. The preceding serpentinization completely encompassed olivine, preserving the relics of augite. Whereas the formation of actinolite was brought

about exclusively by physical and chemical

1/3 CARD:

D COUNTRY

CATEGORY

1959, No. 81762 : RZKhim., No. 23 ABS. JOUR.

AUTHOR

INST. TITLE

ORIG. PUB.

causes, in the formation of asbestos, mechani-ABSTRACT cal processes also took part. Magnetite alcont'd ways appears simultaneously with actinolite. The following variants of chemical reactions are possible: 1) 10(Ca, Mg, Fe)SiO3+3(Mg, Fe)3S1205/(OH)4 - 4H20-2Ca2(Mg, Fe)5S18022/ $/(0\text{H})_2 + 5/3\text{Fe}_3 \overline{0}_4$; 2) $4(\text{Ca}, \overline{\text{Mg}}, \text{Fe}) \text{Si} \overline{0}_3 + 2\overline{\text{Mg}}$,

Fe) $3 \sin_2 0 \frac{1}{5} / (0 + i)_{14} - 3 + 20 \rightarrow 0 \cos_2 (Mg, Fe)_5 \sin_3 \frac{1}{5} / (0 + i)_2 + Fe_3 0_{14}; 3) 2 (Ga, Mg, Fe)_5 \sin_3 + 3 (Mg, Fe)_5 \cos_3 \cos_3 + 3 (Mg, Fe)_5 \cos_3 \cos_3 + 3 (Mg, Fe)_5 \cos_3 + 3 (Mg, F$

2/3 CARD:

COUNTRY : CATEGORY :

ABS. JOUR.: RZKhim., No. 23 1959, No. 81762

AUTHOR : INST. : TIPLE :

ORIG. PUB. :

ABSTRACT: Fe)3Si2O5/(OH)4+CaCO3 - 5H2O-+Ca2(Mg, Fe)5-Si8O22/(OH)2+5/3Fe3O4+CO2-2; 4) 12(Mg, Fe)3Si2O5/(OH)4+6CaCO3 - 21H2O-+3Ca2(Mg, Fe)5Si8O22/(OH)2+7Fe3O4+6CO2-2.-- N. Berling

CARD:

3/3

COUNTRY

: YUGOSLAVIA

D

D

CATEGORY

: Cosmochemistry. Geochemistry. Hydrochemistry

ABS. JOUR.

: RZKhim., No. 23 1959, No. 81766

AUTHOR

: Grafenauer, S.

INST.

5 4000 #

TITLE

: Lead-Zine and Molybdemum Deposits in Mezica

(Yugoslavia)

ORIG. PUB.

: Rud.-metal. zb., 1958, No 3, 263-294

ABSTRACT

The above-named deposits are characterized by a uniform composition of ores and extremely low content of trace elements. The sulfides of Pb appeared later than the sulfides of Zn, chiefly in the second stage of mineralization, which followed after a considerable interval. The action of surface waters led to the formation of wulfenite. V was brought into the zone of oxidation exclusively by these waters.—N. Berling

100

CARD:

COUNTRY

Cosmochemistry. Geochemistry. Hydrochemistry

ABS. JOUR. : RZKhim., No. 23 1959, No. 81778

AUTHOR

CATEGORY

Maieru. O.

INST.

TIPLE

On the Process of Serpentine Erosion in the

Danube Valley

ORIG. PUB. :

Rev. minelor, 1959, 10, No 1, 35-37

ABSTRACT

The processes of erosion of the serpentine mountain range as a whole and in the intermediate stages of oxides, hydroxides and amorphous hydrosilicates of Ni were examined. The chemical analyses of 8 samples of serpentine rocks and 8 samples of garnierite are cited. Data concerning the extraction of hydroxides of Ni from rocks with acids are tabulated. A suggestion is made regarding the exploitation of a serpentine deposit with a view to the production of Ni, Co, Cu, Fe,

Mg and coll. SiO2 .-- E. Chepizhnaya

CARD:

1/1

COUNTRY CATEGORY : BULGARIA

: Cosmochemistry. Geochemistry. Hydrochemistry

ABS. JOUR.

1959, No. 81784 : RZKhim., No. 23

AUTHOR INST.

TITLE

: Atanasov, A. N.

: Sofia University, Biological-Geological-* : Exogenous Galenite from Madzharovo Deposit

ORIG. PUB.

: Godishnik Sofiysk. un-t. Biol.-geol.-geogr. fak., 1956-1957 (1958), 51, No 2, 141-150

ABSTRACT

: The deposit is represented by a system of veins in vulcanogenic rocks. The veins are filled with quartz and barite with galenite, sphalerite, chalcopyrite and pyrites. The zone of oxidation and the zone of secondary sulfides are prominent. In the latter, coatings and overgrowths of galenite are noticed

*Geographical Faculty

CARD:

COUNTRY CATEGORY

ABS. JOUR. : RZKhim., No.23 1959, No.8178L

AUTHOR INST. TITLE

ORIG. PUB. :

ABSTRACT cont'd

around crystals of sphalerite, the formation of which proceeded according to the following scheme: PbSO_k (solution) + ZnS(solid) = PbS (solid) * ZnSOL (solution), under conditions of strong acid medium and small wateriness of rocks .-- G. Volkov

CARD:

2/2

COUNTRY

: BULGARIA

CATEGORY

: Cosmochemistry. Geochemistry. Hydrochemistry

ABS. JOUR.

: RZKhim., No.23

1959, No.81819

AUTHOR

: Rozhdestvenski, A.

IMST.

: Chemical Institute, Bulgarian AS

TITLE

: Composition of Basic Atmospheric Precipitations in the Region of the Black Sea Coast, and Its Significance for Chemical Dynamics'

ORIG. PUB.

: Izv. Khim. in-t, B"lg. AN, 1958, 6, 131-148

ABSTRACT

: In order to study substances entering the sea, it is necessary to take into account the chemical composition of the atmospheric precipitations (rain, snow) because of the considerable part which they play in the water balance of the Black Sea. The data obtained showed that, on the average, minera-

CARD:

^{*}of Sea Waters

COUNTRY CATEGORY 1959, No. 81819 ABS. JOUR. : RZKhim., No.23 AUTHOR INST. TITLE ORIG. PUB. ABSTRACT lization of the atmospheric precipitations on the seaside (in general 3 mg/l; rain 5, cont'd snow 2 mg/l) is slightly less than that of continental precipitations; the percentage of NCO3 in them is a little smaller and that of Cl is greater, but HCO3" still remains the principal ion. As to the content of biogenous elements, the atmospheric precipitations differ little from river waters: at the same time, they have even more ammonia CARD: 2/3 D COUNTRY CATEGORY : RZKhim., No. 23 1959, No. 81819 ABS. JCUR. AUTHOR INST. TITLE ORIG. PUB. ABSTRACT cont'd

: and less nitrates than the latter. A considerable amount of biogenous elements may also be supplied to the sea directly by dust. In view of the characteristic seasonal circulation of the air over the Black Sea, it is reasonable to expect that the distribution of the amounts of the substances precipitated onto the surface of the sea should have different zonality depending on the

season .-- V. Konshin

CARD:

COUNTRY CZECHOSLOVAKIA Cosmochemistry. Geochemistry. Hydrochemistry CATEGORY ABS. JOUR. : RZKhim., No. 23 1959. No. 81825 Santholzer, V.; Podzimek, J.; Macku, J. AUTHOR INST. TITLE Systematic Measurements of Radioactivity of Atmospheric Precipitations and Proof of Presence of Artificial Radioactivity in the Ceskosl. casop. fys., 1958, 8, No 6, 716-721 ORIG. PUB. : The measurement of the radioactivity of at-ABSTRACT mospheric precipitations for the period from 1956 to 1958 showed a sharp increase of radicactivity in the middle and at the end of 1957. The radioactivity of precipitations was mainly due to the presence of the product of disintegration of U235 and Pu239. A de-*Atmosphere 1/2 CARD: D COUNTRY CATEGORY : RZKhim., No. 23 1959. No. 81825 ABS. JOUR. ROHTUA IMST. TITLE ORIG. PUB. : crease of radioactivity with time, proved by ABSTRACT the method of extrapolation, serves as a concontid firmation of the surmise regarding the presence of artificial radioactivity in the atmosphere. The magnitude of this radioactivity constitutes 10-10-10-9 curie per 1 liter of collected atmospheric precipitations .-- T. Levi

CARD: #1015

HUNGARY / Analytical Chemistry. General.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81877

Author

: Nagy, Zoltan

Inst

: Not given

Title

: The Use of the Nomogram in Spectroscopic Analysis

Employing the Method of Additives

Orig Pub

: Magyar kem. lapja, 1958, 13, No 7-8, 303-305

Abstract

: To facilitate the determination of the concentration of the desired substance by the method of additives the following formula is used:

(1 + a1/C) = 1 + a2/C where 3 = (.F2 - AFo)/

(.F1 - AFo), all and a2 are amounts of the added substance, C = concentration sought, Fo = difference in blackening of lines at the initial concentration, AF1 and AF2 = same upon addition of all and a2. It is recommended that

Card 1/2

HUNGARY / Analytical Chemistry. General.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81877

one use the nomogram constructed as three vertical logarithmic straight lines; the logarithms $\Delta F_1 - \Delta F_0$ and $\Delta F_2 - \Delta F_0$ are plotted on the outer straight lines, and the concentration sought is read off the center straight lines (at the point of intersection of this line with the straight line connecting experimentally determined points). -- I. Krishtofori

RUMANIA / Analytical Chemistry. General.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81880

Author

: Pavlovschii, Gh.; Gruia, E.

Inst

: Not given

Title

: Electronometry as a Method of Analysis

Orig Pub

: Rev. chim. (RPR), 1959, 10, No 3, 165-167

Abstract

An electrometric titration method is described, based on the dependence of the radiation process on the number of atoms participating in the photometric reaction as well as on the energy state of the optical (valence) electrons of these atoms. Gradual introduction into the photometric reaction of increasing quantitites of atoms or molecules, which by interacting with excited atoms change the energy state of their optical electrons, permits the determination

Card 1/3

RUMANIA / Analytical Chemistry. General.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81880

of the concentration of the substance to be analyzed, the amount and the composition of the compounds obtained as a result of the interaction of the reactants, as well as the study of various biochemical processes in those cases where other methods are not acceptable. The curves obtained in the electrometric titration E - N (where E is the photometer reading, N is the number of ml of O.1 mM titrant) have inflections at the equivalence points. Results of the electrometric titration of CaCl2 with H3PO4, H3BO3, and AlCla solutions, as well as results of the titration of CaSiOz with AlClz solution In the last case, the existence are given.

RUMANIA / Analytical Chemistry. General.

: Ref Zhur - Khimiya, No 23, 1959, No. 81880

of four chemical compounds in the system Ca - SiO₂ - Al₂O₃ has been determined. -- B. Manole

Card 3/3

Abs Jour

POLAND / Analytical Chemistry. General.

E

E

Abs Jour

: Ref Zhur - Khimiya, No 23, 1959, No. 81887

Author

: Michalek, Wanda

Inst

: Not given

Title

: Analysis of Gases Formed During the Direct Synthesis of Methylchlorosilanes by the Method of Adsorption Chromatography

Orig Pub

: Tworzywo guma lakiery, 1959, 4, No 1, 6-12

Abstract

: A quantitative method for the analysis of gases given off (H₂, CH₃Cl, CH₄, CO, N₂) during the direct synthesis of methylchlorosilanes is described. The apparatus for analysis consists of four parts: an auxilary (a cylinder with CO₂ used as carrier gas, regulators and a gas flowmeter), measuring (the measurement of the amount of the sample to be analyzed), an

Card 1/2

E

E

POLAND / Analytical Chemistry. General.

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81887

adsorber (two chromatographic columns filled with activated charcoal), and a detector (an azotometer filled with 50% KOH solution). The measured sample of the gas mixture to be analyzed is introduced into the apparatus, previously passing CO2 through it (to remove air); the sample by means of the carrier gas is passed through the chromatographic columns where the gas separation occurs. The individual mixture components coming from the columns are passed into the azotometer where their volumes are measured. The analysis duration depends on the gas composition and varies from 10 minutes to one hour. -- A. Nemodruk

Card 2/2

HUNGARY / Analytical Chemistry. Inorganic Analysis.

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81904

Author : Molnar, F.; Toth, Gy.

Inst : Not given
Title : Anion Exchange Separation of Thorium, Zirconium,

and Niobium in Sulfuric Acid Medium

Orig Pub : Acta chim. Acad. scient. hung., 1959, 19, No 1,

75-81

Abstract : See RZ Khim, No 8, 1959, No. 26997

Inorganic Analysis. E CZECHOŚLOVAKIA / Analytical Chemistry.

: Ref Zhur - Khimiya, No 23, 1959, No. 81921 Abs Jour

Author

: Kvapil, Jan

Inst

: Not given

Determination of Potassium with Sodium Title

Tetraphenyl Borate in the Quality Control of

the Production of Potash

Orig Pub

: Kvasny prumysl, 1958, 4, No 4, 87

Abstract

: For the determination of K in the quality control of the production of potash, the use of sodium tetraphenyl borate is recommended. sample is evaporated with conc. HCl and HNO3 (to remove ammonium salts); the residue is dissolved in water; the solution (30-40 mg K) is acidified, using methyl orange as indicator; it is heated to 60-70°, and 25 ml 2% solution

Card 1/2

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

: Ref Zhur - Khimiya, No 23, 1959, No. 81921 Abs Jour

> of sodium tetraphenyl borate is added while stirring. Upon cooling, the residue is filtered off, washed three times on a filter with a saturated solution of soium tetraphenyl borate, dried for one hour at 1050 and weighed. -- T. Zvarova

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81925

Author

: Vesely, Miroslav; Sulcek, Zdenek

Inst

: Not given

Title

Rapid Methods for the Analysis of Metals and Mineral Raw Materials. VI. Photometric Determination of Copper in Natural Carbonates

Orig Pub

: Chem. listy, 1958, 52, No 10, 2010-2012; Collect. Czechosl. Chem. Communs., 1959, 24, No 6, 2052-2055

Abstract

: A highly selective reagent "tetraethylthiura-mdisulfide" (I) was applied to the determination of Cu in limestones. Beer's law is obeyed at Cu⁺² concentration of 5-70 per 50 ml. In the presence of 20% C₂H₅OH, (I) begins to separate from the solution; upon further increase

Card 1/4

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E
Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81925

in C2H5OH concentration the separation of (I) ceases; optimum C2H5OH concentration is 60%. The determination of Cu in the presence of Fe is impossible in HCl, HNO3, and H2SO4 media; reproducible results are obtained in the presence of HClO4and H3PO4, in which case the accuracy of the Cu determination is satisfactory even at an excess of Fe of 13,000 times. In the medium of 1 ml HClO4, 3 ml H3PO4, and 1.6 g Ca(NO3)2 (per 50 ml) containing 30% Cu, it is possible to mask up to 100 ml [sic] Fe2O3. For the determination of Cu, 5 g of limestone is dissolved in the required amount of concentration HNO3 (in the final solution 50 ml should contain 2 ml concentrated HNO3), the solution is boiled, diluted with water

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E
Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81925

to 25-100 ml, and shaken; to 10 ml of filtrate 3 ml 85% H3PO4, 1 ml 70% HClO4, 30 ml 96% C2H5OH, and 3 ml 0.01 M solution of (I) are added; this is stirred, diluted with water to 50 ml, allowed to stand for 30 minutes and the optical density of the solution measured with a purple light filter, Ilford No. 601, using for comparison the solution prepared from an aliquot portion of the solution of limestone to be analyzed without adding (I). With the sample weight of 2 g (in 50 ml), the sensitivity of the method is >0.0005%; the relative error of one determination, ±1.3%. The method is useful for the analysis of limestone with traces of Cu as well as the analysis of mineralogically separated calcites, ankerites

Card 3/4

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81925

and limestones which are used in the rubber industry. For Communication V see RZ Khim, No 23, 1958, No. 77339. -- Jiri Vanecek

RUMANIA / Analytical Chemistry. Inorganic Analysis.

E

Abs Jour

: Ref Zhur - Khimiya, No 23, 1959, No. 81928

Author

: Spacu, P.; Pirtea, Th. I.

Inst

Not given

Title

Potentiometric Determination of Silver in the

Presence of Other Elements

Orig Pub

: An. Univ. "C. I. Parhon". Ser. stiint. natur., 1958, No 20, 55-58

Abstract

: It has been determined that the method previously developed by the authors for the determination of Ag+ by the potentiometric titration with sodium nitroprusside solution (RZ Khim, No 8, 1958, No. 24742) is also applicable when Tl+ and most elements that are found with Ag in alloys and ores (Pb, Cd, Zn, Cu, Co, Ni, Mn, Sb) are present in the solution. The solution

Card 1/2

RUMANIA / Analytical Chemistry. Inorganic Analysis.

Ľ

Abs Jour

: Ref Zhur - Khimiya, No 23, 1959, No. 81928

to be analyzed containing AgNO₃ and 0.01-0.2 g of each of the salts of the above metals (anions: NO₃-, SO₄-2, CH₃COO-, and C₄H₄O₆-2) is diluted with water to 125-150 ml, 7-8 g NaNO₃ and 0.8-1.5 g Complexone III are added, and this is titrated with 0.1 N solution of Na nitroprusside at 380 mv. The error in the determination of Ag is 3%. -- B. Manole

HUNGARY / Analytical Chemistry. Inorganic Analysis.

Abs Jour

: Ref Zhur - Khimiya, No 23, 1959, No. 81935

Author

: Dzubay, Miklos

Inst

: Not given

Title

: Flame Photometric Determination of Small

Amounts of Barium

Orig Pub

: Magyar kem. folyoirat, 1958, 64, No 12, 483-484

Abstract

: 0.001-0.01 M concentrations of barium are determined at 770 mu in the acetylene air flame, using Zeiss photometer with the light filter K77. The calibration curve for the concentration interval of 14-110 mg of Ba per 100 ml is a straight line; the error in the determination of Ba in uncontaminated solutions varies from -4.4 to +1.5%. The

determination of Ba is possible in the presence

Card 1/2

HUNGARY / Analytical Chemistry. Inorganic Analysis.

E

Abs Jour

: Ref Zhur - Khimiya, No 23, 1959, No. 81935

of large amounts of Ca; the presence of Mg leads to high results. -- N. Poleuktov

HUNGARY / Analytical Chemistry. Inorganic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81947

Author : Sommer, L. Inst : Not given

Title : A Spectrophotometric Study of an Inner Complex of Titanium with Chromotropic Acid in Solution

Orig Pub : Acta chim. Acad. scient. hung., 1959, 18, No 1-4, 121-127

Abstract : See RZ Khim, 1959, No 8, No. 27043; No 9, No. 31000

Card 1/1

CHINA / Analytical Chemistry. Inorganic Analysis.

E

Abs Jour

: Ref Zhur - Khimiya, No 23, 1959, No. 81951

Author

: Chiang Jih-huei

Inst

: Not given

Title

: Colorimetric Determination of Micro Quantities

of Vanadium in Tungsten Ores

Orig Pub

: Dizhi yu kantan, 1958, No 24, 21-23

Abstract

: A simple and rapid method for the determination of V₂O₅, based on the oxidation of V+4 to V+5 with Fe+3 and the colorimetric determination of the equivalent quantity of Fe+2 formed by means of a dipyridyl, is described. Cu+2 and Al+3, which interfere, are removed from the solution by adding Na₂S and NH₄Cl, respectively. WO₃, MoO₄-2, MnO₄-, CrO₄-2, Fe+3, Pb+2, Zn+2, Sn+4, Ti+4, and other ions

Card 1/3

CHINA / Analytical Chemistry. Inorganic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81951

do not interfere. The sample (0.5 g) is fused in an iron crucible with 3.5 g Na₂O₂; the melt is leached out with hot water, 2.3 drops of 3% H₂O₂ are added, and the solution is boiled carefully for 1 minute; upon the appearance of a bluish-green color in the solution, indicating the presence of CuO₂-2, 5-10 drops of Na₂S solution are added, and the solution is boiled for 1 minute with stirring. The resulting solution after cooling is diluted with water to 100 ml, stirred and rapidly filtered through a dry filter into a dry flask. To 5-10 ml of the filtrate, 0.5-1 g NH₄Cl is added; this is filtered into a colorimetric cell having a 25 ml volume; the precipitate is washed until the total volume of the filtrate is 15 ml, 4 ml

Card 2/3

CHINA / Analytical Chemistry. Inorganic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81951

HCl (1:1) and 2 ml 8% NaNO2 solution are added, allowed to stand for 15 minutes; 1 g of urea (to remove excess NaNO2) is added, allowed to stand for 15 minutes; 1 ml 0.25% aqueous solution of (-dipyridyl, 1 ml Fe⁺³) (120 or 240% Fe⁺³) solution, 1.5 ml concentrated NH₄OH (to pH 3-9) are added, diluted with water to the mark, stirred, allowed to stand for 15 minutes, and the optical density is measured. The concentration to be determined is 0.0002-1% V₂O₅. Light absorption of the colored solution is constant at pH 3-9. -- A. Petrenko

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81954

Author

: Habrcetl, Miloslav

Inst

: Not given

Title

Polarographic Determination of Molybdenum in

Steel

Orig Pub

: Hutn. listy, 1959, 14, No 4, 324-325

Abstract

: A method for the determination of Mo in carbon steels as well as in low- and medium-alloy steels (containing < 0.30 Cu), based on the polarography of Mo in CH₂COONH₄ medium at pH of 4.5, is described. The sample (1 g) is dissolved in 20 ml HNO₂ (1:1), evaporated to dryness; the residue is evaporated with 10 ml concentrated HCl, 25 ml water, and 20 ml concentrated NH₄OH are added, diluted with

Card 1/2

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81954

water to 100 ml and filtered (to remove Fe(OH)3). To 50 ml of filtrate, containing MoO₄-2, WO₄-2, Cu+2, Ni+2, and Co+2, 5.5 ml glacial CH₃COOH, 3.7 g Complexone III and 2 ml 0.5% gelatin solution are added, diluted with water to 100 ml, and the polarogram is obtained upon passing N₂. For the analysis of steel containing Al, the sample is dissolved in 20 ml concentrated HCl, Fe+2 is oxidized by adding 2 ml HNO₃; the solution is evaporated to dryness; the residue is dissolved in 10 ml HCl, and the analysis continued as shown above. -- N. N. Turkevich

RUMANIA / Analytical Chemistry. Inorganic Analysis.

مال

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81960

Author : Spacu, P.; Radulescu, Elena; Vasilescu, Claudia;

Balanel, Elena

Inst : Not given

Title : Separation and Determination of Manganese in

Ferromanganese

Orig Pub : An. Univ. "C. I. Parhon", Ser. stiint. natur.,

1958, No 20, 69-77

Abstract: Two methods were applied with improvements to

the determination of Mn in ferromanganese under factory conditions: complexometric method

(Pribil, R.; Horacek; Z. anal. Chem., 132, 140 (1951)) and ion-exchange method (RZ Khim, No 6, 1955, No. 9697). In the 1st method the sample to be analyzed, containing 30-150 mg

Card 1/4

RUMANIA / Analytical Chemistry. Inorganic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81960

Mn, is treated with a concentrated HNO3 solution, neutralized with a NaOH solution until the appearance of weak opalescence; 25-30 ml 7% Complexone III solution (I), and 10 ml glacial CH3COOH containing l g Ca(CH3COO)2 (to form a buffer) are added; l g PbO2 (to oxidize Mn+2 to Mn+3) is introduced; this is stirred (l.5 min.), filtered under vacuum, and the residue (excess PbO2) washed with water; the filtrate, containing all of Mn in the form of a Mn (III) complex, is titrated with 0.1 M solution of Mohr's salt. To prevent the decomposition of the Mn (III) complex, the analysis (after the addition of PbO2) should be conducted rapidly, (55 min.). The error of the method is 20.5%. In the 2nd

RUMANIA / Analytical Chemistry. Inorganic Analysis.

: Ref Zhur - Khimiya, No 23, 1959, No. 81960

method the cation exchange resin Amberlite 1R-120 is used; 20% HCl solution (150 ml) is used for the elution of Mn. The resulting solution is neutralized with a concentrated NH40H solution, and Mn is determined by an indirect titration: an excess of 0.1 N solution of 1 [means (I)], 8-10 ml buffer solution (350 ml NH40H + 54 g NH4Cl) are added, and the excess of (I) is back-titrated with 0.1 N. ZnSO4 solution, using Eriochrome Black T as indicator. It was determined that the use of NaOH or KOH (instead of NH4OH) for the neutralization causes high results in the determination of Mn. This method is two times more accurate than the first one, but is more time-consuming; it is also necessary to separate

Card 3/4

Abs Jour

RUMANIA / Analytical Chemistry. Inorganic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81960

SiO₂ previously. After the separation of Mn, Fe in the solution is determined by a titration with permanganate (after reducing Fe+3 to Fe+2 with electrolytic Cd). -- B. Manole

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81970

Author

: Matrka, Miroslav; Navratil, František

Inst

: Not given

Title

: Photometric Determination of Nitrite with

N.N'-Tetramethylbenzidine

Orig Pub

! Chem. prumys1, 1959, 9, No 2, 75-77

Abstract

A new method for the photometric determination of NO₂ ions was developed, based on the oxidation by NO₂ ions of N,N'-tetramethyl-benzidine to orange-colored diphenoquinone (absorption maximum at 475 mu), containing the cation (CH₃)₂N⁺ = C₆H₄ = C₆H₄ = N⁺(CH₃)₂. To 1 ml 0.1% solution of N,N'-tetramethyl-benzidine in 1 N. HCl, 9 ml 1 N. HCl and 0.5-3 ml NaNO₂ solution to be analyzed

Card 1/2

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81970

(-0.01 g NaNO₂ in 1 liter) are added, allowed to stand for 15 min., diluted with water to 100 ml, and the optical density of the solution is measured at 500 mu (bluish-green light filter) after 3 hours, using "3.5" [sic] cells. Beer's law is obeyed at NO₂ concentrations <30 ½/ml. Oxidizing agents (CrO₄-2, MnO₄-, Ce⁺⁴) and reducing agents (SO₃-2, S₂O₄-2) interfere. -- N. Turkevich

HUNGARY / Analytical Chemistry. Inorganic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81974

Author : Fodor, J.
Inst : Not given

Title : Rapid Determination of the Phosphorus Content

in Steel During Manufacture Using the Isotope

Dilution Method

Orig Pub : Acta chim. Acad. scient. hung., 1959, 19, No 1,

13-21

Abstract : No abstract given

Card 1/1

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81975

Author : Flum, Zdenek Inst : Not given

Title : Photometric Determination of Phosphorus in the

Ashes of Solid Fuel

Orig Pub : Paliva, 1959, 39, No 4, 126-129

Abstract: The sample of ashes to be analyzed (0.05-0.1 g) is evaporated in a Pt crucible two times with 2 ml concentrated HNO3 and 1 ml HF. The residue is evaporated again to dryness with 1 ml concentrated HNO3 and dissolved in 5 ml 20% H2SO4 with boiling for 5 minutes. The solution is filtered, 2 ml 4% Na₂S₂O₅ (to reduce Fe⁺³) is added; this is boiled (to remove SO₂) and diluted with water to 100 ml. To 20 ml of the

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E : Ref Zhur - Khimiya, No 23, 1959, No. 81975 Abs Jour

> resulting solution, 10 ml 20% H2SO4, 35 ml water and 10 ml 5% ammonium molybdate in 10% H2SO4 are added, 2 ml freshly prepared SnCl2 solution (0.5 g SnCl₂·2H₂O in 0.5% HCl) is introduced; this is diluted with water to 100 ml, and the optical density of the solution is measured after 15 minutes, using 2.006-cm cells and the red light filter. Beer's law is obeyed at concentrations of P of 4-64 %/ml. The reproducibility of the results of the analysis at < 0.1% P205 is 4.8%; at somewhat higher P contents, it reaches 1.3%. Small quantities of As and NO3 do not interfere with the determination of P. -- N. N. Turkevich

Card 2/2

Inorganic Analysis. E CZECHOSLOVAKIA / Analytical Chemistry.

: Ref Zhur - Khimiya, No 23, 1959, No. 81979 Abs Jour

Author

: Kopa, Lubos

Inst

: Not given

Title

: Determination of Oxygen Content in Aluminum

by the Vacuum Fusion Method

Orig Pub

: Hutn. listy, 1959, 14, No 4, 322-324

Abstract

: A modification of the Sloman method (Sloman, J. Instit. Metals 71, 391 (1945)) for the determination of 0 combined with aluminum as Al203 is described. Upon heating with graphite in the oven of the vacuum extraction apparatus, Al carbide and CO are formed; CO is determined in the Orsat analyzer. 16-20 g of copper (to prevent the distillation of Al) is placed in a graphite crucible (diameter 20 mm, height

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81979

50 mm), which is placed in a quartz crucible (diameter 33 mm, height 100 mm), sprinkled with powdered graphite and connected to a quartz tube and a 2-stage diffusion pump; this is heated to 1250° for 15-30 min. The temperature is then lowered to 1050°, a 1.5-2 g sample is added, and after 10 minutes the temperature is raised to 1550°. The evolution of CO is complete within 20-30 minutes. In the control experiment, CO is formed for 30 minutes, the quantity being 50.01 ml. The determination error is 0.0010-0.0057%. -- N. N. Turkevich

Card 2/2

RUMANIA / Analytical Chemistry. Inorganic Analysis.

E

Abs Jour

: Ref Zhur - Khimiya, No 23, 1959, No. 81981

Author

: Trandafirescu, E.; Iordachescu, Jeana; Diaconescu, Georgeta; Florescu, Creanga Silvia

Inst

: Not given

Title

: The Mechanism of Oxidation-Reduction Reactions.
The Detection of Small Quantities of Selenium
and Tellurium in the Presence of Arsenic

Orig Pub

: Farmaica (RPR) 1959, 7, No 2, 135-141

Abstract

: On the basis of measurements of normal oxidation-reduction potentials (E_O) of the systems SeO₃-2/Se and TeO₃-2/Te, as a function of the pH of the medium, conditions were determined which permit the detection of Se and Te present simultaneously in the solution as H₂SeO₃ and H₂TeO₃. At pH:O, the rate of the SeO₃-2

1

RUMANIA / Analytical Chemistry. Inorganic Analysis.

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81981

reduction (E₀=0.76v) with SnCl₂ (Sn+4/Sn+2) E₀ 0.3 volts) is large, and elemental Se separates as a red-orange powder, while TeO₃-2 (E₀=0.305 volts) is practically not reduced by SnCl₂ even when a large excess of SnCl₂ is present and the solution is heated. In an alkaline medium (pH=14), the difference between E₀ values for SeO₃-2 and TeO₃-2 is small (Co.1 volts), and both metals are reduced very rapidly with SnCl₂ (E₀=0.85 volts). In this case, Te and Se separate as black powders; however, Se has a greyish-violet coloration and represents the allotropic form which contains OH⁻. Upon drying, Se precipitate regains the red-orange color, while the Te precipitate remains black. For the detection of Se and Te,

Card 2/3

RUMANIA / Analytical Chemistry. Inorganic Analysis.

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81981

E

one drop of the solution to be analyzed, one drop of $SnCl_2$ solution in HCl (5 g $SnCl_2$ is dissolved in 5 ml concentrated HCl + 95 ml water; pH 10.5), and after some time two drops of 2-N. NaOH are placed on the filter paper and dried with warm air, at the same time observing the color of the spot. The detection limit is 5 x 10-6 g of selenite or tellurite. The presence of As+3 (also Sb) does not interfere with the detection of Se and Te; Bi interferes with the reaction in an alkaline medium. For the detection of As in the presence of Se and Te, it is recommended that one use the Tananaev and Panamarev method (after precipitating Se and Te with atomic H).

YUGOSLAVIA / Analytical Chemistry. Inorganic Analysis.

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81983

Author : Stevanovic, Mirko; Mlinar, Anton; Kangrga,

Dušanka

Inst : Not given

Title : The Detection of Fluoride

Orig Pub : Vojnosanit. pregl., 1959, 16, No 3, 217-219

Abstract: A microcrystalloscopic method for the detection of F has been developed. To 1 drop of the solution to be analyzed, placed on a microscope slide, 1 drop of saturated PbCl₂ solution is added and the crystals formed are observed under 100 x magnification. At optimum conditions (1 F in 1 drop, dilution 1:50,000) starlike PbFCl crystals are formed; at 0.1 F (dilution 1:500,000), still visible crystals are grain-

Card 1/2

YUGOSLAVIA / Analytical Chemistry. Inorganic Analysis. E
Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81983

like; at 0.2 F mixed crystals are obtained, and in this case it is recommended that one evaporate a drop of the solution to be analyzed and add the saturated PbCl₂ solution to the dry residue. The best crystal form is obtained with the saturated PbCl₂ solution in dilute H₂SO₄ (1:20); however, then, the sensitivity of the reaction is considerably decreased. 1 F can be detected in the presence of 15 SO₄-2 by the above method. -- N. Turkevich

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81984

Author

: Romoyacek, Jiri

Inst Title : Not given : Titrimetric Determination of Carbon Disulfide

Orig Pub

: Collect. Czechosl. Chem. Communs., 1959, 24,

No 2, 604-608

Abstract

A new method for the determination of CS2, based on the alkalimetric titration of dialkyldithio-carbamic acid formed in the reaction between CS2 with a secondary amine, has been developed. The titration is performed in a pyridine, isopropyl alcohol, and water (2:2:1) medium, employing a potentiometric or a visual endpoint; in the second case, 1% thymolphthalein solution in pyridine is used as the indicator.

Card 1/3

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E
Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81984

Best results are obtained when an excess of NaOH is added, and this is titrated with an HCl Three secondary amines were tested: solution. morpholine, diethanolamine, and piperidine; the first two amines give satisfactory results with both methods of end-point detection, whereas in the case of piperidine a slow color transition of the visual indicator is observed, and a poor potentiometric titration curve is obtained. In comparison with known methods the new method is considerably faster (< 10 minutes) and is applicable to industrial control. In the application of the method to the analysis of the first fraction from the distillation of benzene (containing 8-24% CS2)

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81984

and to the estimation of the purity of CS2, good results were obtained. -- Jiri Vanecek

Card 3/3

CHINA / Analytical Chemistry. Inorganic Analysis.

E

Abs Jour

: Ref Zhur - Khimiya, No 23, 1959, No. 81985

Author

: Not given

Inst

: Not given

Title

: Methods for Rapid Determination of Silicon and

Aluminum Under Field Conditions

Orig Pub

: Dizhi yuekan, 1958, No 12, 34-35

Abstract

The determination of SiO₂ is based on the precipitation of Si as K₂SiF₆ from a strongly acidic saturated KCl solution after the decomposition of the sample by the method of alkali fusion, the hydrolytic dissolution of the precipitate obtained, and the titration of the equivalent quantity of liberated HF with a standard NaOH solution. The sample (0.5 g) is fused with 4 g NaOH in Ag or a Ni crucible

CHINA / Analytical Chemistry. Inorganic Analysis. Abs Jour

: Ref Zhur - Khimiya, No 23, 1959, No. 81985

for 10 minutes at 500°; the melt is leached out with hot water; 15 ml concentrated HCl is added with stirring, and after cooling the solution is diluted with water to 100 ml. 25 ml of the resulting solution contained in an ebonite beaker, 5 ml concentrated HNO3 and 5 g KCl are added, and with continuous stirring 5 ml 20% KF solution is introduced. After 10 minutes the precipitate is separated by a filtration through a pulp filter and washed with a saturated KCl solution in 50% C2H5OH until the washings are no longer acidic; the precipitate with the filter is placed in 100 ml of water heated to 80°; upon completion of hydrolysis, 2 ml 1% phenolphthalein solution is added, and this is titrated with O.1 N. NaOH solution until

Card 2/5

CHINA / Analytical Chemistry. Inorganic Analysis. : Ref Zhur - Khimiya, No 23, 1959, No. 81985 Abs Jour

> a nondisappearing red tint is obtained. determination of Al203 is based on the complexation of Al as a soluble complex with Complexone III (I), the back-titration of the excess of (I) with Zn(CH3COO)2 solution at pH of 5.7 using the system ferrocyanide-ferricyanide benzidine as indicator, displacement of Al from the complex by precipitating AlF3 and back-titration of the liberated equivalent amount of (I) with $Zn(CH_3COO)_2$. The sample (0.1-0.15 g) is fused with 2-4 g NaOH for 10-15 minutes at 400-500°; the melt, after cooling, is leached out with hot water; this is acidified with concentrated HCl solution and diluted with water to 100 ml. To 25 ml of the resulting solution, 1-2 drops concentrated HNO3 and 10-15

CHINA / Analytical Chemistry. Inorganic Analysis.

F

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81985

ml 2% solution of (I) are added; this is heated to 50-60°, neutralized with NH4OH solution (1:3) in the presence of methyl orange, 5 ml acetate buffer (204 g CH3COONa + 9.4 ml CH3COOH in 1 liter) is added; this is boiled for 2-3 minutes, cooled; 6 drops 3% benzidine solution in glacial CH3COOH and 3 drops ferro-ferricyanide solution (10 ml 10% K3Fe(CN)6 and 5 ml 1% K4Fe(CN)6 are diluted with water to 100 ml) are added, and this is titrated with Zn(CH3COO)2 solution (1.4 g metallic Zn is dissolved in 1:1 HCl, neutralized with a 1:1 NH4OH solution; 100 ml acetate buffer solution and 2.1 ml glacial CH3COOH are added, and this is diluted with water to 1 liter) until the appearance of a light-blue color; 1 g NaF is introduced;

Card 4/5

CHINA / Analytical Chemistry. Inorganic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81985

this is diluted with water to 100-120 ml, boiled for 10 minutes; upon cooling, 4 drops 3% benzidine solution and 2 drops of ferroferricyanide solution are added and titrated with Zn(CH₃COO)₂ solution. A control experiment is conducted at the same time. The presence of 1% TiO₂ in the sample interferes. -- A. Petrenko

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81988

Author : Povondra, Pavel; Vebr, Jaroslav

Inst : Not given

Title : The Technical Analysis of Natural Fluorites

Orig Pub : Chem. listy. 1958, 52, No 10, 2208-2209; Collect. Czechosl. Chem. Communs., 1959, 24,

No 2, 637-640

Abstract: The feasibility of a rapid and certain decomposition of fluorites by evaporation with HClO4 + H3BO3 was determined. The sample of finely divided fluorite (1 g), dried at 100°, is boiled with 15 ml HClO4 (1:3), saturated at 50° with boric acid, and evaporated to dryness. To the residue after cooling, 5 ml concentrated HCl and 80 ml hot water are added.

Card 1/3

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E
Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81988

H₂SiO₃ which separated during this process is filtered off after 10 minutes and determined by the usual method of weight loss after several evaporations with HF. The residue is treated with several ml of HCl (1:4), diluted with hot water, filtered off, calcined, and weighed as BaSO₄. The combined filtrates are diluted with water to 250 ml and, using an aliquot of the resulting solution, Ca is determined by titration with 0.1 M Complexone III solution in strongly alkaline medium using murexide as the indicator. Small amounts of metals of the NH₄OH group are masked by adding 5 ml 30% triethanolamine solution; at greater Fe and Al contents these metals are previously separated by precipitating with urotropine. In order to

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E
Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81988

correct for CaCO3, the CO2 content is found by an indirect titrimetric determination; however, large quantities of CaCO3 have to be removed by the usual method after a preliminary decomposition with a dilute CH3COOH solution. -- Karel Kamen

Card 3/3

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81990

Author : Rezac, Zdenek; Adamec, Miroslav

Inst : Not given : The Determination of Alkalies in Synthetic Pyrolusite

Orig Pub : Chem. listy, 1958, 52, No 10, 2006-2007; Collect. Czechosl. Chem. Communs., 1959, 24

No 5, 1730-1732

Abstract: A simple method for the determination of alkalies adsorbed on synthetic pyrolusite was developed. Because of the very strong adsorption properties of pyrolusite, which interfere with the quantitative leaching of alkalies even in an acid medium, MnO2 is previously reduced to MnO by calcining with

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81990

> powdered carbon; the adsorption capacity of MnO for alkalies is considerably less. The sample of pyrolusite to be analyzed (1 g) is mixed with 1.5 g powdered carbon in a Pt crucible and calcined in an electric Silit oven for 10 minutes at 800°; calcining for a longer time and higher temperature does not influence the results. The cooled crucible is placed in 100 ml of water, boiled for 15 minutes, and the solution with the precipitate is diluted with water to 500 ml. After 15 minutes, 50 ml of the clear liquid is removed with a pipette provided with a cotton filter, and titrated with O.1 N. HCl solution using Tashiro indicator (100 ml 0.03% methyl red solution in ethanol + 15 ml aqueous methylene blue solution);

Card 2/3

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E
Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81990

prior to the end-point the solution is heated to boiling. -- Karel Kamen

CHINA / Analytical Chemistry. Inorganic Analysis.

: Ref Zhur - Khimiya, No 23, 1959, No. 81993 Abs Jour

: Not given Author Inst : Not given

: A Simplified Analysis of Iron Ore Used for Title

Pig Iron Smelting by the Local Method

: Dizhi yu kantan 1958, No 18, 8-11, 31 Orig Pub

: The usual methods for the determination of SiOo Abstract (using gelatin) Fe₂0₃ (using K₂Cr₂0₇), S (as BaSO₄), and P (as phosphovanadium molybdate

complex) are described. -- A. Petrenko

Card 1/1

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

: Ref Zhur - Khimiya, No 23, 1959, No. 82007 Abs Jour

: Dubsky, Ivo Author : Not given Inst

: The Use of Complexometry for the Control of Title

Plating Paths

: Chem. prumys1, 1959, 9, No 2, 80-81 Orig Pub

: A method for the determination of Cd+2 in Abstract cadmium plating baths, and Zn+2 in zinc and brass baths was developed. CN ions are tied up with an excess of acetone. 10 ml of the sample is diluted with water to 100 ml; to 10 ml of the solution obtained, diluted with water, there are added 30-50 ml acetone, 10-15 ml ammoniacal buffer solution (54 g NH4Cl and 350 ml concentrated NH4OH solution in 1 liter); this

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82007

is titrated with 0.5 M Complexone III solution in the presence of 0.1 g Eriochrome Black T (mixture of 1 g of indicator with 100 g NaCl) to a light-blue color of the solution. In the determination of Cd+2, it is recommended that the titration be conducted very slowly, or that there be added to the solution titrated, 1 ml 0.05 M MgSO₄. In the analysis of plating salts, 1-2 g of the sample is dissolved in 100 ml of water, and 10 ml of the resulting solution is used for the determination. -- N. N. Turkevich

Card 2/2

POLAND / Analytical Chemistry. Inorganic Analysis.

E

Abs Jour

: Ref Zhur - Khimiya, No 23, 1959, No. 82008

Author

: Rusiecki, Wladyslaw; Bidzinski, Zygmunt;

Lenicka, Joanna

Inst

: Not given

Title

: The Use of Thio Compounds for the Detection of Metals in Forensic Chemical Analysis

Orig Pub

: Farmac. polska, 1959, 15, No 7, 113-115

Abstract

The possibility of using thioacetamide and Na₂CS₃ instead of H₂S in forensic chemical analysis for the detection of Hg and As was studied. For the detection of Hg by precipitation from solutions obtained, following the mineralization of the biological material to be analyzed, Na₂CS₃ was found to be most useful; thioacetamide behaves similarly to H₂S. The

POLAND / Analytical Chemistry. Inorganic Analysis.

: Ref Zhur - Khimiya, No 23, 1959, No. 82008

most complete precipitation of As as sulfide takes place when H2S and Na2CS3 are used. On the basis of the data obtained, it is recommended that Na2CS3 be used instead of H2S for the detection of Hg and As. -- A. Nemodruk

Card 2/2

Abs Jour

GDR / Analytical Chemistry. Organic Analysis.

E

Abs Jour

: Ref Zhur - Khimiya, No 23, 1959, No. 82016

Author

: Kumpan, P.

Inst

: Not given

Title

: The Techniques of Elemental Analysis. Part I (continuation). Semimicro Determination of

Carbon and Hydrogen

Orig Pub

: Chem. Techn., 1958, 10, No 11; Glassapparatetechnik, No 4, 25-30

Abstract

: The general procedures for the determination of C and H through combustion of the organic substance (sample weights 25-45 mg) in an O₂ stream inside a filled tube (PbO₂ or CuO and Ag) heated automatically are described; the arrangement for connecting the absorption system to the tube, the regulation of the O₂

E

GDR / Analytical Chemistry. Organic Analysis.

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82016

stream, the execution of the blank experiment, the selection of the standard substance, the technique of weighing solid, viscous, liquid, and inflammable substances; the execution of combustion of solid and liquid substances The viscous submanually or automatically. stances are previously diluted, while heating in a dry box, are placed in a tared boat, weighed after 10 minutes, and the sample in the boat is covered with a layer of quartz. A small KClOz crystal is placed on the bottom of the capillary tube for poorly inflammable substances. A special protective rod wrapped with Pt wire, is placed in the tube after introducing the sample weight. The combustion of nonvolatile substances is carried out in an 02

Card 2/3

GDR / Analytical Chemistry. Organic Analysis.

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82016

stream (14-15 ml/min), and of volatile substances, in an air stream; the automatic heating is used for successive analyses only. Before weighing the absorption apparatus, the stopcocks are opened and closed to bring the pressure to atmospheric. The maximum error for C is ± 0.3%; for H, from +0.2 to -0.1%. For the beginning of the article, see RZ Khim, No 12, 1959, No. 42139. -- V. Miroshina

H

CHINA / Analytical Chemistry. Organic Analysis.

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82017

Author : Wu Tsun-hao Inst : Not given

Title : A Direct Method for the Microdetermination

of Oxygen in Organic Substances

Orig Pub : Hua xue shi jie, 1958, 13, No 12, 574-576

Abstract: A micro method for the direct determination of O was modified (RZ Khim, No 10, 1956, No. 29395). The accuracy of the determination of O in petroleum and plastics is 2%. The determination of O in organic substances containing C, H, Br, Cl, N, O, S, I, and As gives accurate results. The method is not applicable to substances containing F and P. -- From Author's Summary

Card 1/1

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82020

Author : Vecera, Miroslav; Bulušek, Jaroslav

Inst : Not given

Title : Organic Quantitative Analysis. XX. The
Study of the Micro Method for the Determination
of Chlorine in Organic Substances by Combustion

in an Empty Tube

Orig Pub : Chem. listy, 1958, 52, No 8, 1526-1536; Collect. Czechosl. Chem. Communs., 1959, 24, No 5, 1630-1642

Abstract: A rapid and simple micro method for the determination of Cl is described, and the causes of possible errors are discussed in detail. 1-6 mg of the substance is placed in a Pt boat and burned for 15 minutes in a

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis.

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82020

tube (T) with a porous quartz insert heated by a portable (800°) and stationary (720°) electrical ovens in an 02 stream (15 ml/min). Cl is trapped in an absorber, which is indirectly connected to (T) and which contains 2 ml 5% H2Op. After combustion, the solution is washed off from the absorber with 18 ml of alcohol; 5 drops of 0.02% aqueous Brilliant Yellow (adsorption indicator) solution and 0.1 N. KOH solution are added, resulting in a weakly alkaline solution; this is neutralized with O.1 N. CH3COOH; one more drop of CH3COOH solution is added, and this is titrated with 0.01 N. AgNO3 solution to the color change from greenish-yellow to orange and the simultaneous appearance of turbidity. In the

Card 2/3

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E
Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82020

presence of SO₄⁻² the color change is worse, therefore, in the analysis of substances containing S. Fibek's method is used for the titration (RZ Khim, No 2, 1958, No. 4320). In the calculation. a correction is made for the blank (0.014 ml 0.01 N. AgNO₃ solution). The results of the analyses of 1,5-dichloroanthraquinone, DDT, 2,4-dinitrochlorobenzene, hexachlorocyclohexane, and chlorobenzene are given. The maximum error is ± 0.3%; the average statistical error is 0.02%. For part XIX, see RZ Khim, No 18, 1959, No. 64206. -- K. Kamen

CHINA / Analytical Chemistry. Organic Analysis.

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82026

Author

: Ko Hsiu-ch'i; Lu P'ei-chang

Inst

: Not given

Title : The Accuracy of Methods for the Determination of Gases as Applied to Pure Hydrocarbons

Orig Pub

: Chung-kuo K'o-hsueh-yuan Shih-yu Yen-chiu-so, Mei-t'an Yen-chiu-shih Yen-chiu Pao-kao Chi-kan, 1958, No 2, 24-34

Abstract

: A distillation column for distillation of low-boiling gases (CH4, C2H6, C3H8, n-C4H10, iso-C4H10, C2H4, C3H6, a -C4H8, 6-C4H8, iso-C4H8) was constructed. Upon comparison of the accuracy of the gaseous chromatographic method and the low-temperature distillation method for the analysis of 7- and 9- component

Card 1/2

CHINA / Analytical Chemistry. Organic Analysis.

E

E

Abs Jour

: Ref Zhur - Khimiya, No 23, 1959, No. 82026

mixtures of gaseous hydrocarbons, as well as of H₂ and N₂, it was determined that, using silica gel and activated charcoal, the accuracy of gaseous chromatography is relatively high; the relative deviation is 50.3%, sometimes 0.4-0.5%; the accuracy of both methods for the determination of hydrocarbons 50₂ is the same, and only for the determination of H₂, N₂, and CH₄ by the low temperature distillation method is the relative deviation somewhat larger than 1%. -- A. P.

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis.

: Ref Zhur - Khimiya, No 23, 1959, No. 82027 Abs Jour

Author

: Janak, J.; Novak, J.

Inst

: Not given

Title

: Chromatographic Semimicro Analysis of Gases. XIV. The Direct Determination of Individual Gaseous Paraffins and Olefins in Butadiene-1,3

Orig Pub

: Collect. Czechosl. Chem. Communs., 1959, 24,

No 2, 384-390

: See RZ Khim, No 20, 1958, No. 67335 Abstract

Card 1/1

HUNGARY / Analytical Chemistry. Organic Analysis.

E

Abs Jour

: Ref Zhur - Khimiya, No 23, 1959, No. 82028

Author

: Schulek, Elemir; Maros, Laszlo

Inst

: Not given

Title

: Analysis of Aldehydes. I. Iodometric

Determination of Formaldehyde and Acetaldehyde as -Oxysulfonates (Bisulfite Derivatives of

Aldehydes)

Orig Pub

: Magyar kem. folyoirat, 1958, 64, No 12, 480-482

Abstract

: A method for the determination of HCHO and CH3CHO, based on the iodometric determination of sulfite formed by the decomposition of the aldehyde-bisulfite compound with cyanide, is described. To the aldehyde solution (0.4-0.5 g HCHO or 0.2-0.25 g CH3CHO) Na2SO3 solution is added, and the liquid is covered by a

HUNGARY / Analytical Chemistry. Organic Analysis.

: Ref Zhur - Khimiya, No 23, 1959, No. 82028

layer of pentane to prevent action by the atmospheric O₂ and the loss of SO₂. The mixture is acidified with CH₂COOH, and after 10 minutes (HCHO) or after 20 minutes (CH₂CHO) the excess of sulfite is reacted with iodine NaOH and KCN solutions are added; after a few minutes, this is neutralized with HCl and titrated with O.1 N. iodine solution. The accuracy is ± 0.2%. The advantages of the method can be attributed to the fact that oxidizers present and dissolved O₂ are tied up by excess of sulfite and do not interfere with the analysis. -- I. Krishtofori

Card 2/2

Abs Jour

HUNGARY / Analytical Chemistry. Organic Analysis.

E

Abs Jour

: Ref Zhur - Khimiya, No 23, 1959, No. 82039

Author

: Fodurne Varga, Eva

Inst

: Not given

Title

: The Application of the van Slyke Micro Method

as Modified by Hussey and Maurer

Orig Pub

: Magyar kem. lapja, 1958, 13, No 3, 108-111

Abstract

: The mechanism of the reaction of primary aliphatic amines with HNO2 and the modification of the van Slyke method (Hussey, Allen, S., and Mauer John, E., Anal. Chem. 24, 1642 (1952)) are discussed. An apparatus with ground glass joints instead of rubber connections was constructed; the absorption column arrangement was modified in order to decrease the hydrostatic pressure. -- I. Krishtofori

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis.

: Ref Zhur - Khimiya, No 23, 1959, No. 82040 Abs Jour

: Vecera, M.; Gasparić, J. Author

: Not given Inst

: Identification of Organic Substances. XXIII. Title The Paper Chromatographic Study of Aliphatic

Amines

: Collect. Czechosl. Chem. Communs., 1959, 24, Orig Pub

No 2, 465-473

: See RZ Khim, No 9, 1959, No. 31102 Abstract

Card 1/1

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis.

: Ref Zhur - Khimiya, No 23, 1959, No. 82041 Abs Jour

: Kubias, J. Author : Not given

: The $ar{ ext{D}}$ etermination of Ethanolamines in Their Inst Title

Mixture

: Collect. Czechosl. Chem. Communs., 1958, 23, Orig Pub

No 11, 2012-2017

: See RZ Khim, No 3, 1959, No. 8038 Abstract

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82047

Author

: Cuta, František; Klozar, Vaclav

Inst

: Not given

Title

: Coulometric Determination of Styrene and Methyl Oleate Present Together in the Same Mixture

Orig Pub

: Chem. listy, 1958, 52, No 10, 1899-1902; Collect. Czechosl. Chem. Communs., 1959, 24,

No 5, 1482-1486

Abstract

Methyl oleate (I) and styrene (II) present in the same mixture can be determined coulometrically, since the addition of the electrolytically generated Br to (II) occurs 15 times slower than to (I). Addition of Cl to both substances occurs with the same rate. The reaction is conducted in 10-16 N. CH₃COOH containing HBr

Card 1/2

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82047

(concentration 0.5-1 N.) or HCl (concentration 0.5-1.5 N.). (I) is determined in the first case; the sum of (I) and (II) in the second case; the content of (II) is calculated by difference. The maximum error in the determination is ±1%; the average error ± 0.15-0.24%, using -1 mg sample weights. -- 0. Knessl

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis.

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82049

Author

Lakota, Vladimir

Inst

! Not given

Title

Chromatographic Determination of Phenol in

Technical Grade o-Cresol

Orig Pub

: Chem. listy, 1958, 52, No 10, 1922-1925; Collect. Czechosl. Chem. Communs., 1959, 24,

No 4, 1127-1131

Abstract

: A method was developed for the determination of phenol (I) in technical grade o-cresol (II) based on (1) the separation of (I) from both (II) and m-cresol (III) by chromatography, using the "inverse phase" method and the silicone-treated diatomaceous earth column containing CHCl3, and based on (2) the

Card 1/3

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E
Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82049

photometric determination at 620 mu, the color being developed with the Gibbs reagent (1% solution of 2,6-dibromoquinonechlorimide in alcohol) after 3 hours. Diatomaceous earth was washed for 4 days with 15% HCl, then water, dried, calcined for 20 minutes at 900°, mixed with the solution of 20 ml ethyltrieth-oxylane [probably means ethyltriethoxysilane] in 480 ml dry CCl4 and, after removing the excess solution, dried for 5 hours at 160°. 200 g silicone treated diatomaceous earth was mixed with 150 ml CHCl3 saturated with water; additional water was added; the mixture was shaken; the residue was filtered on a Buchner funnel and placed in a column. Upon running the chromatogram by the displacement method

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E
Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82049

using water saturated with CHCl3, I, II, and III are separated into fractions. I is eluted first, then III and, finally, II; I is separated quantitatively even at a 1000 times excess of II. In the determination of I in technical grade II, a sample containing 10 I is chromatographed, and the first 10 fractions of the eluate, 20 ml each, (I is usually found in the 5th and 6th fractions) are taken for the photometric measurements. -- J. Vanecek

Card 3/3

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82051

Author Inst : Franc, J.

Title

: Not given : Chromatography of Aromatic Isomers. IX. Paper Chromatographic Separation of Some Benzene

Mono- and Tricarboxylic Acids

Orig Pub

: Collect. Czechosl. Chem. Communs., 1958, 23,

No 11. 2018-2024

Abstract : See RZ Khim, No 13, 1959, No. 45631

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82052

Author

: Franc, Jaroslav

Inst Title : Not given

The Determination of the Methyl Ester of p-Toluic Acid in the Presence of the Dimethyl Ester of Terphthalic Acid by the Method of

Paper Chromatography

Orig Pub

: Chem. listy, 1958, 52, No 10, 2204-2205; Collect. Czechosl. Chem. Communs., 1959, 24,

No 1, 302-304

Abstract

: A paper chromatographic method for the separation of dimethyl terphthalate (I), methyl ester of p-toluic acid (II), and monomethyl terphthalate (III) as corresponding hydroxamic acids (HA) was developed. The method was

Card 1/4

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E
Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82052

utilized for the determination of II in technical grade I. HA are detected on the chromatogram with FeClz and determined quantitatively by the color intensities of the spots which are compared with a standard scale. In the analysis of technical grade I, the sample is enriched with II utilizing its greater solubility in alcohol; 5 g technical grade I is dissolved with heating in 50 ml 96% C2H5OH; the solution is cooled, the crystals of I are filtered off and washed with C2H5OH (3 X 10 ml). The filtrate is evaporated to 7 20 ml, cooled; the separated crystals are filtered off again and washed with CoH5OH (3 X 5 ml). The filtrate is evaporated to 10 ml, and the precipitate is filtered off; to the filtrate

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E
Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82052

40 ml NH₂OH solution (1 part 5% NH₂OH·HCl solution in alcohol is mixed with 2 parts 5% KOH solution in alcohol, the solution is filtered) is added; this is heated for 10 minutes to boiling, cooled, filtered, and the volume is made up to 25 ml. 25u liter of the solution is placed on Whatman Paper No. 4 and chromatographed for 45 minutes by the descending method with the mixture C4H₉OH-C₂H₅OH-H₂O (2:2:1); the chromatogram is dried and sprayed with the 2% FeCl₃ solution in the mixture n-C₄H₉OH-C₂H₅OH (1:4), whereby HA acquires a blue violet color. The HA spots of I and III remain at the starting point; R_f for HA of II is 0.78. The minimum concentration which can be detected is 0.05% of II. To

Card 3/4

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E
Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82052

prepare the standard scale, the alcoholic solution containing 0.025 g II is mixed with 40 ml of hydroxylamine solution, heated for 10 minutes to boiling, diluted to the initial C2H5OH volume and 5, 10, 15 u liter are pipetted off - this corresponds to 0.05, 0.10, and 0.20 [probably means 0.15] % II. -- Bedrich Meloun

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis.

: Ref Zhur - Khimiya, No 23, 1959, No. 82056 Abs Jour

Author

: Franc, J.

Inst Title : Not given : Chromatography of Aromatic Isomers. X. Energy of the Inner Hydrogen Bond of Amino-

and Oxyanthraquinones

Orig Pub

: Collect. Czechosl. Chem. Communs., 1959, 24,

No 1, 250-257

: See RZ Khim, No 14, 1959, No. 49328 Abstract

Card 1/1

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis.

: Ref Zhur - Khimiya, No 23, 1959, No. 82058 Abs Jour

Author

: Velich, V.

Inst

: Not given

Title

: The Determination of 8-0xyquinoline-5-sulfonic

Acid

Orig Pub

: Collect. Czechsol. Chem. Communs., 1958, 23,

No 9, 1803-1805

: See RZ Khim, No 24, 1958, No. 81375 Abstract

COUNTRY: : Czechoslovakia Laboratory Equipment. Instrumentation. F CATEGORY RZKhim., No.23, 1960, No. 82077 ABS. JOUR. Jiskra Zdenek, Fleischer Bernard AUTHORS : Not given INST. High Temperature X-ray Camera TITLE ORIG. PUB. : Hutn. listy, 1959, 14, No 4, 280-287 : An X-ray camera for the study of change of phases and ABSTRACT microstructure at high temperatures is described. The investigated specimen is heated in two cylindrical resistance furnaces with a diffraction slot between them. The entire system is enclosed into a cylindrical cassette 57.3 or 64 mm in diameter and is placed over a filming container in a vacuum from 10⁻³ to 10⁻⁵ mm Hg. With the use of a second container with vacuum-tight slot, both a cylindrical cassette* as well as a counter, fitted on a movable arm, for the observation of the change of phases can be used. Centering of the specimen is done semiautomatically. Maximum temperature is 1400°. *of 190 mm in diameter CARD: 1/2 F Czechoslovakia COUNTRY CATEGORY RZKhim., No. 23,1960, No. 82077 ABS. JOUR. AUTHOR INST. TITLE ORIG. PUB. : The temperature of the specimen is measured with a thermoelement. Photographs of Pt, Ag and steel were taken at temperatures ranging from 20 to 1200° and exposure time 60-120 minutes. From Authors' Summary

CARD:

Czechoslovakia COUNTRY:

CATEGORY

RZKhim., No.23,1960, No. 82085 ABS. JOUR.

AUTHOR

Hora Oldrich

INST.

Not given

TITLE

New Apparatus for Measuring Low Pressure

: Automatizace, 1959, 2, Nr 1, 18-20 ORIG. PUB.

: This is a brief review of apparatus manufac-ARSTRACT

tured by different companies.

Ya. Satunovskiy

CARD:

Czechoslovakia COUNTRY

CATEGORY

RZKhim., No.23,1960, No. 82087 ABS. JOUR.

AUTHORS:

Wittenberg E. : Houdek M.,

INST.

: Not given

TITLE

: Manometer for Measuring Low Steam Pressure

: Paliva, 1959, 39, No 3, 93-95 ORIG. PUB.

ABSTRACT

: Differential manometer of ± 0.08 mm of Hg

is described.

Ya. Satunovskiy

CARD:

```
COUNTRY:
          : Poland
CATEGORY
          : RZKhim., No. 231960, No. 82113
ABS. JOUR.
          : Olpinski Wojciech
AUTHOR
          : Not given
INST.
            Colorimeter for Measuring the Thermoeffect
TITLE
            of Slow Reactions Between Solid and Gases
          : Chem. analit., 1958, 3, No 3-4, 683-692
ORIG. PUB.
          : Description of a double colorimeter and a
ABSTRACT
            study of the reaction of carbon oxidation
            with atmospheric oxygen at 25-85° is given.
             The carbon was place into both vessels of
             the colorimeter; air was passed through one
             of them and nitrogen with the same velocity
CARD: 1/2
```

COUNTRY : Poland

CATEGORY

ABS. JOUR. : RZKhim., No. 23,1960, No. 82113

AUTHOR : INST. : TITLE :

ORIG. PUB. :

abstract : through the second vessel. The difference in the temperature between the two vessels of the colorimeter was measured with a differential thermocouple.

A. Vorob'yev

CARD: 2/2

7

```
: Czechoslovakia
COUNTRY:
CATEGORY
          : RZKhim., No. 23,1960, No. 82151
ABS. JOUR.
          : Korinsky Jan, Rehecek Karel
AUTHORS
           : Not given
INST.
             Laboratory Mixer with Circular Motion
TITLE
           : Chem. prumysl, 1959, 9, No 1, 27
ORIG. PUB.
           . A laboratory mixer for simultaneous mixing
ABSTRACT
             of liquid in 9 chemical flasks consists of
             a board on which the flasks are fitted. The
             board is suspended in a horizontal position
             on silane strings and is connected to the
             eccentric of a 35 v motor.
 CARD:
                                       B. Kaplan
 COUNTRY
 CATEGORY
             RZKhim., No. 1960, No.
 ABS. JOUR.
 AUTHOR
 INST.
 TITLE
 ORIG. PUB.
  ABSTRACT
```

4

COUNTRY CZECHOSLOVAKIA Organic Chemistry. General and Theoretical CATEGORY

Problems of Organic Chemistry

RZKhim., No. 23 1959, No. 82170 ABS. JOUR.

Kovar, J.; Blaha, K. AUTHOR

INST.

The Configuration of Nitrogen-Containing TITLE

Compounds. VI. The Configuration of Substi-

tuted 2-aminocyclohexanols

ORIG. PUB. Collect. Czechosl. Chem. Communs, 1959, 24,

No 3, 797-803

ABSTRACT No abstract.

See RZhKhim., 1958, No 24, No 81560

1/1 CARD:

: CZECHOSLOVAKIA COUNTRY

: Organic Chemistry. General and Theoretical CATEGORY

Problems of Organic Chemistry

1959, No. 82175 : RZKhim., No.23 ABS. JOUR.

: Svoboda, M.; Jonas, J.; Sicher, J. AUTHOR

INST. : Stereochemical Studies. X. Effects of Confi-TITLE guration and Size of Ring upon Dissociation

Constants of 2-aminocyclanols

: Chem. listy, 1958, 52, No 8, 1596-1602; Col-ORIG. PUB.

lect. Czechosl. Chem. Commun, 1958, 23,

: The values of dissociation constants of pK'a ABSTRACT cis- and trans-2-aminocyclanols, derivatives of cyclopentane down to cyclotridecane, as well as of derivatives of cyclohexadecane and cycloeicosane were measured. Dependence of

the dissociation constant of 2-aminocyclanols on the ring dimension is similar to the corresponding dependence discovered earlier (Pre-

*No 8. 1551-1558

1/8 CARD:

ľ

G

COUNTRY :

ABS. JOUR.: RZKhim., No. 23 1959, No. 82175

AUTHOR : INST. : TITLE :

ORIG. PUB.

ABSTRACT cont'd.

log, V., Häfliger, O., Helv. chim. acta, 1950, 33, 2021) for cycloalkylamines. In rings smaller than cyclononane, the cis-isomers of 2-aminocyclanols have higher pK'a values than trans-isomers. Beginning with 2-aminocyclononanol, this dependence is of an inverse order. For the sake of comparison, the values of pK'a, as well as those of certain N-methylated 2-aminocyclanols were measured. Different basicity is explained by the

CARD:

2/8

: RZKhim., No.23

COUNTRY

1959, No. 82175

ABS. JOUR.

INST. TITLE

ORIG. PUB.

ABSTRACT cont'd.

: presence of intramolecular hydrogen bonds, the formation of which is influenced primarily by reciprocal remoteness of HO-and NH2-groups. The value of ΔpK'a [pK'a(cis)=pK'a (trans)] is a relative measure of this remoteness. The values of ΔpK'a show that in rings which are smaller than nine-membered ones, cis-isomer forms a hydrogen bridge easier than trans-isomer. Beginning with cyclonomane the hydrogen bridge is formed easier in trans-

CARD:

Ğ COUNTRY CATEGORY • ABS. JOUR.: AZKhim., No. 23 1959, No. 82175 AUTHOR INST. TITLE ORIG. PUB. : isomer. Maximal remoteness of HO- and NH2-ABSTRACT groups is attained in 12-membered ring. The hydrochlorides (HC) of 2-aminocyclanols of contid. the general formula CHOHOH2 (CH2) -4CH2CHNH2. ·HCl (I) were prepared from alcohol solutions of 2-aminocyclanols by the addition of ether solution of HCl and by recrystallization from the mixture of C2H5OH + ether or iso-C3H7OH+ ether (p in I, m.p. in °C cis- and trans-I, 11/8 CARD: G COUNTRY CATEGORY No. 82175 : RZKhim., No.23 1959, ABS. JOUR. AUTHOR INST. TITLE ORIG. PUB. : pK'a cis- and trans-I, are given): 5, --, ABSTRACT 9.11, 8.85; 6, --, --, 9.22, 9.07; 7, 177-179, 115-117, 9.38, 9.30; 8, 186-187, 126-128, 9.41, 9.37; 9, 170-171, 160-161, 9.36, 9.38; 10, 136-138, 176-177, 9.17, 9.23; 11, 150-152, 197-198, 9.11, 9.18; 12, 201-202, 228-229, 8.00 cont'd. 8.99, 9.10; 13, 191-192, 213-215 (from alcohoi), 8.98, 9.07; 14, --, --, 8.94, 8.99; 16, 217-218, 184-185, 8.88, 8.90; 20, 173-174, 139-141, 8.85, 8.86. The following were also *8.93, 8.98; 15, --, --CARD: 5/8

Ğ

G

GOUNTRY : CATEGORY :

ABS. JOUR.: RZKhim., No. 23 1959, No. 82175

AUTHOR
INST.
TITLE

ORIG. PUB. :

ABSTRACT cont'd.

determined: pK's for cis- and trans-forms of N-methyl I (p=6, 9.47, 9.15) and N,N-dimethyl-I (p=6, 9.14, 9.08; p=10, 8.9, 8.89). The values of pK's were determined by the titration of 4.10-3 N solutions of (CH3)4NOH at 20° in an N2 atmosphere. Through the methylation of 1.15 g of trans-2-aminocyclanol (14 hrs of boiling with 5 ml of 90% HCOOH and 5 ml of 40% CH2O), trans-2-dimethylaminocyclohexanol (II) is obtained; HC, m.p. 183-

CARD:

6/8

*I in 80% aqueous methyl ether of methylene glycol with 0.1 N solution of

COUNTRY

CATEGORY :

ABS. JOUR. : RZKhim., No.23 1959, No. 82175

AUTHOR : INST. : TITLE :

ORIG. PUB.

ABSTRACT cont'd.

184.5° (from alcohol); picrate, m.p. 146148.5°. Analogously to II, HC of cis-2-dimethylaminocyclohexanol, m.p. 182-183°, is obtained from the cis-compound. Similarly to II
(40 hrs of boiling), from trans-2-aminocyclodecanol, trans-2-dimethylaminocyclodecanol,
yielding 92%, b.p. 97°/1 mm, is obtained; HC,
m.p. 127-129° (from alcohol-ether); picrate,
m.p. 109-110 (from alcohol). Similarly, from
the cis-compound, cis-2-dimethylaminocyclo-

CARD:

COUNTRY CATEGORY

ABS. JOUR.: RZKhim., No. 23 1959. No. 82175

AUTHOR INST.

TIPLE

ORIG. PUB. :

ABSTRACT cont'd

: decanol, b.p. 100-103°/1 mm; HC, m.p. 139lul (from alcohol-ether); picrate, m.p. 123-123.5° (from iso-C3H7OH). Report IX, see RZhKhim., 1959, No 20, No 71413.-- A. Emr

*is prepared

CARD:

8/8

COUNTRY

: POLAND

CATEGORY

: Organic Chemistry. General and Theoretical

ABS. JOUR.

Problems of Organic Chemistry RZKhim., No. 23 1959, No. : RZKhim., No. 23

AUTHOR INST.

: Cuta, F.; Beranek, E.; Pisecky, J.

TITLE

: Spectrophotometric Investigation of Products of the Reaction of Sym. Trinitrobenzol with Hydroxides, Sulfites, Sulfides and Cyanides

: Chem. analit., 1958, 3, No 3-4, 281-289 ORIG. PUB.

ABSTRACT

: Sym. trinitrobenzol (I) produces a red color with the ions OH, SO3 and SH, and with CN a violet one reaching maximum at pH 9. The maximum of absorption increases up to a concentration of 0.5 n. NaOH, and with an increase of concentration up to 9 n. NaOH, discoloration occurs. The anion and range of values of pH at which coloring takes place, the maximum of absorption of acids obtained from the addition of the anion to I in mu,

CARD:

G

COUNTRY :

ABS. JOUR.: RZKhim., No. 23 1959, No. 82188

AUTHOR : INST. : TITLE :

ORIG. PUB. :

ABSTRACT cont'd

and the maximum of absorption of I are given. OH, 10.5-12.3, 440, 350; CN, 8.3, 400, 300; SH, 7-10, 461, 220; SO₃-2, 6-8, 462-470, -3. The dissociation constant k=(1.8±0.1)·10⁻³ at pH 8 for the reaction (I·SO₃)-1+SO₃-2 was calculated. The sensitivity of the reaction of I with SO₃-2 at pH 9 constitutes 1: 400,000. The dissociation constant of I, (1.2±0.2)·10⁻¹⁴, was determined. The absorption spectra of I with the above-mentioned anions are given.-- S. Ioffe

CARD:

.2/2

COUNTRY

: CZECHOSLOVAKIA

G

Organic Chemistry. Synthetic Organic Chemistry

ABS. JOUR.

: RZKhim., No.23

1959, No. 82241

ROHTUA

: Svoboda, M.; Tichy, M.; Sicher, J.

INST. TITLE

: Stereochemical Studies. XI. Synthesis of cisand trans-2-aminocyclotetradecanol and 2-ami-

nocyclopentadecanol

ORIG. PUB.

: Collect. czechosl. chem. commun., 1958, 23,

ABSTRACT

No 10, 1958-1964; Chem. listy, 1958, 52, 1951: In order to study the relation between the configuration and chemical and physical properties, cis- and trans-2-aminocyclotetradecanol (cis- and trans-I) and cis- and trans-2-aminocyclopentadecanol (cis- and trans-II) were synthesized. Through the hydrogenation of the oxime of 2-oxycyclotetradecanone (III) over Pt (from PtO₂) in alcohol at ~ 20° and normal pressure, cis-I was obtained, yielding 21.85 g (from 100 g III), m.p.120-121° (from

CARD:

COUNTRY CATEGORY ABS. JOUR.: RZKhim., No. 23 1959, No. 82241 AUTHOR INST. TITLE ORIG. PUB. benzene, ethyl acetate and alcohol); hydro-ABSTRACT chloride (HC), m.p. 223-2240 (from alcoholcontid. ether); N-benzoyl derivative (BD), yield 97%, m.p. 183-1840 (from alcohol); N-p-nitroben-zoyl derivative (NBD), m.p. 194.5-1950 (from alcohol). Analogically, from the oxime of 2-oxycyclopentadecanone (IV), cis-II, yield 11.75 g (from 44.2 g IV), m.p. 89-90° (from petr. ether and benzene), is obtained; HC, m.p. 220-222.5° (from alcohol-ether); BD, 2/8 CARD: Œ COUNTRY CATEGORY 1959, No. 82241 : RZKhim., No. 23 ABS. JOUR. AUTHOR INST. TITLE ORIG. PUB. : yield 90%, m.p. 142-142.5° (from acetone); NBD, m.p. 162-163.5° (from alcohol). By boil-ABSTRACT cont'd. ing (18 hours) trans-2-pheny1-4,5-dodecamethylene-A2-oxazoline with concentrated HCl in alcohol, trans-I was obtained, yielding 93.5%, m.p. 105-106° (from petroleum ether); HC, m.p. 215-216° (from alcohol-ether); BD, yield 88.5%, m.p. 170-171° (from alcohol); NBD, m.p. 192-193° (from alcohol). Analogously, from trans-2-phenyl-4,5-tridecamethylene-

3/8

COUNTRY : CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 82241

AUTHOR INST. TITLE

ORIG. PUB. :

ABSTRACT cont'd

Δ-oxazoline, trans-II was synthesized, yield 82%, m.p. 93-93.5° (from petroleum ether); HC, m.p. 192-193°; BD, yield 83%, m.p. 143-143.5° (from acetone-alcohol); NBD, m.p. 181-182° (from alcohol). By interaction with 2 moles of CH3SO₂Cl in C₂H₂N (12 hours at 0°), the synthesized BD were transformed into corresponding 0-methane sulfonates [the initial amino-alcohol, yield of methane sulfonate in %, m.p. in °C (from ethyl acetate) are given]:

CARD:

4/8

COUNTRY CATEGORY Ğ

ABS. JOUR. : RZKhim., No. 23 1959, No. 82241

AUTHOR : INST. : TITLE :

ORIG. PUB.

ABSTRACT cont'd

cis-I, 99.5, 1h8-lh9; trans-I, 97, 129-130; cis-II, 100, 120-121; trans-II, 95, 107-108. The obtained methane sulfonates being heated with CH₂COOK in alcohol (10-30 hours at 80-95°) are transformed into 2-phenyl-h,5-polymethylene—A-oxazoline, the configuration of which is opposite to the initial amino-alcohols [the initial amino-alcohols [the initial amino-alcohol, polymethylene, yield in %, m.p. in °C (from petroleum ether), b.p. in °C/mm, m.p. of picrate in °C

CARD:

COUNTRY CATEGORY ABS. JOUR.: RZKhim., No. 23 1959, No. 82241 AUTHOR INST. TITLE ORIG. PUB. : ABSTRACT are given : cis-I, trans-dodecamethylene, cont'd 95.8, 62-63, 190-200/0.2-0.3, 159-160 (from alcohol); trans-I, cis-dodecamethylene, 72, 95-96, --, 160-161 (from alcohol); cis-II. trans-tridecamethylene, 95.6, 47-48, 180-190/0.16, 149-150 (from CH30H); trans-II, cis-tridecamethylene, 91.6, 68.5-69, 195-202/0.2, 136.5-137 (from CH30H). In BD and WBD of trans-I and trans-II left standing in dioxane, saturated with gaseous HCl, acyl 6/8 CARD: G COUNTRY CATEGORY 1959, No. 82241 : RZKhim., No. 23 ABS. JOUR. AUTHOR INST. TITLE ORIG. PUB. ABSTRACT : migrates and HC of trans-2-benzoyloxy- or cont'd 2-p-nitrobenzoyloxycycloalkylamines are formed (acyl, cycloalkyl and m.p. in OC are given): benzoyl, tetradecyl, 172-173; p-nitrobenzoyl, tetradecyl, 173-175; benzoyl, pentadecyl, 166.5-167; p-nitrobenzoyl, pentadecyl, 179-181. For cis-isomers such like migration is not observed. The configuration of the products was determined according to the various ability of acyls for migration,

7/8

COUNTRY CATEGORY

ABS. JOUR.: RZKhim., No. 23 1959, No. 82241

AUTHOR INST. TITLE

ORIG. PUB. :

ABSTRACT reaction ability at cyclization and infrared cont'd spectra. The graphic dependence of the melt-

ing temperature of 2-aminocyclanols and their BD on the value of the cycle which has a sharp maximum for C12 is given. Report X, see abstract 82175 .-- Jan Kovar

CARD: 8/8

COUNTRY : CZECHOSLOVAKIA

: Organic Chemistry. Synthetic Organic Chemistry CATEGORY

: RZKhim., No. 23 1959, No. 822h8 ABS. JOUR.

: Pospisil, J.; Ettel, V. AUTHOR

INST. TITLE : Oxidation of Pyrocatechin. III. Oxidation of

4-methyl-pyrocatechin

ORIG. PUB. : Collect. Czechosl. Chem. Communs, 1959, 24,

No 2, 341-346

ABSTRACT : No abstract.

See RZhKhim., 1958, No 19, No 64406

CARD: 1/1

CZECHOSLOVAKIA COUNTRY

Organic Chemistry. Synthetic Organic Chemistry CATEGORY :

RZKhim; No. 23 1959, No. 82249 ABS. JOUR. :

Hermanek, S.; Stanek, J. AUTHOR

INST. A New Method of Synthesis of Homoisevanillin TITLE

Collect. Gzechosl. Chem. Communs, 1959, 24, ORIG. PUB. :

No 4, 1366-1368

No abstract. ABSTRACT See RZhKhim., 1958, No 24, No 81580

1/1 CARD:

: CZECHOSLOVAKIA COUNTRY : Organic Chemistry. Synthetic Organic Chemistry

CATEGORY

1959, No. 82273 : RZKhim., No. 23 ABS. JOUR.

: Chmatal, V.; Allan, Z. J.; Muzik, F. AUTHOR

: Aromatic Diazo- and Azo-Compounds. XXIX. Pre-INST. TITLE paration of Tritriazolobenzol and Its Deri-

vatives

: Collect. Czechosl. Chem. Communs, 1959, 24, ORIG. PUB.

No 2, 484-493

: No abstract. ABSTRACT See RZhKhim., 1959, No 10, No 34845

1/1 CARD:

COUNTRY : CZECHOSLOVAKIA

CATEGORY : Organic Chemistry. Synthetic Organic Chemistry

ABS. JOUR. : RZKhim., No. 23 1959, No. 82277

AUTHOR : Trojna, M.; Hubacek, J.

INST. Sulfonation and Some Derivatives of β, β, β .

trichloro-w.w-diphenylethane

ORIG. PUB.: Collect. Czechosl. Chem. Communs, 1959, 24,

No 3, 935-943

ABSTRACT: No abstract.
See RZhKhim., 1958, No 24, No 81607

CARD: 1/1

COUNTRY : POLAND G

CATEGORY : Organic Chemistry. Synthetic Organic Chemistry

AES. JOUR. : RZKhim., No. 23 1959, No. 82285

AUTHOR : Tarnowska, M.
INST. : Chemical Scientific Society of Lodz

TITLE : N-Ethanolo-x-naphthylamide of 3-amino-6-

methylbenzenesulphonic Acid

ORIG. PUB. : Soc. scient. lodz. acta chim., 1958, 3, 67-71

ABSTRACT : 3-NH2-6-CH3C6H3SO2N(R)CH2CH2OH (I), where al-

ways R= - Aaphthy I, was synthesized by two methods: the condensation of 3-NO2-6-CH3C6H3-SO2Cl (II) with RNH2 and subsequent interaction between the formed 3-NO2-6-CH3C6H3SO2NHR (III), with CH2OHCH2Cl (IV) and the reduction of the formed 3-NO2-6-CH3C6H3SO2N(R)CH2CH2OH

(V), as well as the condensation of RNHCH2-CH2OH (VI) with II. The latter method produces

CARD: 1/6

COUNTRY CATEGORY ABS. JOUR. : RZKhim., No. 23 1959, No. 82285 AUTHOR INST. TITLE ORIG. PUB. ABSTRACT better results since, during the preparation of I according to the first method. difficulties occur in the separation of IV from the excess of III. It is better to use the latter method in the form of a Na- or K-salt insoluble in C6H6. To 3.5 moles of HSO3Cl, during 1.5 hours (at a temperature not below 110° and not above 115°), I mole of p-NO2C6-HuCH3 was added, heated for 1 hour at 1150 and I hour at 120°, poured out hot (80°) on CARD: 2/6 COUNTRY G CATEGORY 1959, No. 82285 ABS. JOUR. : RZKhim., No. 23 AUTHOR INST. TITLE ORIG. PUB. : ice, and 92% of II was obtained; b.p. 220°//28 mm, m.p. 45-47° [from (C2H5)20]. 0.3 mole ABSTRACT contid of II was added during 10 min at 95-100 to 0.3 mole of RWH2 in 48 g of pyridine; after about 2 hours ~400 ml of water were added and by oxidation with HCl, III was separated, yielding 74%. III, m.p. 155-157° (from alcohol, then from benzene) was also obtained with a yield of 70% by heating for ~2 hours, almost

CARD:

COUNTRY CATEGORY ABS. JOUR.: RZKhim., No. 23 1959, No. 82285 AUTHOR INST. TITLE ORIG. PUB. : to the the b.p., of 0.5 mole of RNH2 with 0.5 mole of II and 0.5 mole of CH3COONa·3H2O ABSTRACT contid in 300 ml of 30% alcohol. 25 mmoles of III were added to 3 g of NaOH in 200 ml of water; then, during 15 min at 80-900, 75 mmoles of IV were added, and after 1 hour the crushed residue obtained was boiled with dilute NaOH and 62% of V was obtained, m.p. 126-127° (from alcohol). V, with a yield of 71%, was also obtained by the addition, during 30 min at CARD: 4/6 G COUNTRY CATEGORY : RZKhim., No. 23 1959, No. 82285 ABS. JOUR. AUTHOR INST. TITLE ORIG. PUB. :85°, of 0.16 mole of II to a mixture of 0.15 ABSTRACT mole of VI, 21.8 g of CH3COONa 3H2O and 300 cont'd ml of ~25% alcohol with subsequent heating for 1 hour. 0.03 mole of V was added for 15 min at 80-90° to a mixture of 11 g of Fefilings, 1.5 ml of 36% HCl and 100 ml of water; after 2 hours the mixture was alkalized, the residue was extracted with alcohol in the Soxhlet apparatus, the extract was evaporated,

OARD: 5/6

COUNTRY CATEGORY Ĝ

ABS. JOUR.: RZKhim., No.23 1959, No. 82285

AUTHOR IMST. TITLE

ORIG. PUB. :

dissolved in HCl, and with dilute NaOH 60% ABSTRACT of I was separated, m.p. 92-940 (from alcocont'd hol) .-- N. Turitsyna

6/6 CARD:

COUNTRY : CHINA

: Organic Chemistry. Synthetic Organic Chemistry CATEGORY

No. 82292 1959, : RZKhim., No. 23 ABS. JOUR.

: Yen Chih-kuang; Wang Jen AUTHOR

INST. : Investigation of Tetrahydrofuran. IV. Hydro-TITLE

genation of Furan in a Gaseous Phase under Normal Pressure

ORIG. PUB.

: K'e-hsüeh t'ung-pao, Nauchn. vestn., Scientia, 1958, No 24, 753-754 : The conditions of hydrogenation of furan (I)

ABSTRACT in a gaseous phase under normal pressure were studied. Skeletal Ni (Ni 38.6%, Cr/Ni = 0.03) was used as a catalyzer. The following optimal conditions for the performance of the reaction were established: temperature of reac-

tion 110° , volumetric velocity $\sim 450-550$ l.hour-1, concentration of I, 18-20%. The

yield of tetrahydrofuran under these conditions

1/2 CARD:

COUNTRY CATEGORY

ABS. JOUR. : RZKhim., Ro. 23 1959, No. 82292

AUTHOR INST. TITLE

ORIG. PUB.

ABSTRACT cont'd

amounts to 93-95%. Childon is a by-product of the reaction; its yield augments with an increase of the temperature of the reaction and with a decrease of the volumetric velocity. Report III, see RZhKhim., 1959, No 17, No 60848. -- L. Popova

Ź

CARD:

5/5

TRIMUOD CATEGORY : RUMANIA

: Organic Chemistry. Synthetic Organic Chemistry

ABS. JOUR.

: RZKhim., No. 23

1959, No. 82296

AUTHOR

: Manta, I.; Berger, T.; Silaghi, E.

INST. TITLE

: Synthesis of Certain Coronary Dilating

Chromones and Flavones

ORIG. PUB.

: Rev. chim. (RPR), 1959, 10, No 2, 69-71

ABSTRACT

: With a view to pharmacological trials, 3-methyl- and 2,3-dimethylchromones (Ia,b), 3-methylflavone (II) and 7-R-flavones [IIIa-d, where a H = OCH3; b OCH2COOC2H5; c OCH2C6H5; d OCH2CH2N(C2H5)2] were synthesized. 4 g of Na powder are introduced at 0-5° into a mixture of 50 g of o-oxypropiophenone (IV) and 300 g of HCOOC2HG, mixed for 8 hours at 15°, poured out into water, oxidized and Ia is separated;

CARD:

COUNTRY CATEGORY ABS. JOUR.: RZKhim., No. 23 1959, No. 82296 AUTHOR INST. TITLE ORIG. PUB. : yield 70%, m.p. 60° (from ligroin). Mixture of 25 g of IV, 12 g of CH₃COONa and 30 g of (CH₃CO)₂O is heated for 7 hours at 180°, poured into water, mixed for 3 hours, the ABSTRACT contid product is treated with 5% NaOH and To is obtained, yield 68%, m.p. 97° (from water).
45 g of IV, 200 g of C6H5C00Na and 150 g of C6H5COC1 are heated for 10 hours at 180-1850 and II is separated, yielding 72%, m.p. 660 (from alcohol). 25 g of resacetophenone, 95 CARD: 2/5 G COUNTRY CATEGORY 1959. : RZKhim., No. 23 No. 82296 ABS. JOUR. AUTHOR INST. TITLE ORIG. PUB. eg of C6H5COC1 and 125 g of C6H5COONa are heated for 4 hours at 180-185° and processed ABSTRACT contid with 0.8 1 of alcohol, boiled for 30 min with a solution of 90 g of KOH in 0.1 l of water, the alcohol is removed and the residue is poured into 1.5 1 of water; CO2 is passed through the solution and 25 g of 7-oxyflavone (V), m.p. 240 (from ethyl acetate) are separated. To 20 g of V, in a solution of 3.4 g

CARD:

COUNTRY : CATEGORY :

ABS. JOUR.: RZKhim., No.23 1959, No. 82296

AUTHOR : INST. : TITLE :

ORIG. PUB. :

ABSTRACT cont'd

of NaOH in 20 ml of water, a solution of 10 g of CH2ClCOOH in 20 ml of water is gradually added for 8 hours, diluted in water, the product is precipitated with dilute HCl (1:1), reprecipitated from NaHCO3, etherified with alcohol and HCl, and IIIb is obtained, yielding 60%, m.p. 122° (from alcohol). V is methylated with (CH3)2SO4 in alkaline medium and IIIa is separated, yielding 65%, m.p. 110° (from ether). By the benzylation of V

CARD:

4/5

COUNTRY

ABS. JOUR. : RZKhim., No. 23 1959, No. 82296

ORIG. PUB.

ASSTRACT cont'd

in aqueous CH₃OH, comprising NaOH, IIIb is synthesized, yielding 52%, m.p. 174-175° (from ether). Analogously, from V and ClCH₂CH₂N-(C₂H₅)₂, IIId is obtained, hydrochloride, m.p. 136-137°.-- D. Vitkovskiy

COUNTRY BULGARIA

Organic Chemistry. Synthetic Organic Chemistry CATEGORY

ABS. JOUR. : AZKhim., No. 23 1959, No. 82308

AUTHOR Spasov, A.; Panayotova, B.

Sofia University, Physicomathematical Faculty Interaction of F-Lactams and Organomagnesium INST.

TITLE

Compounds

Godishnik Sofiysk. un-t. Fiz.-matem. fak., ORIG. PUB. :

1956-1957 (1958), 51, No 3, 87-101. In the boiling (3 hours) of β -lactam of α,β -ABSTRACT

diphenyl-β-(N-phenyl)-aminopropionic acid with 2 moles of C6H5MgBr, a mixture of an alcohol-soluble ketone, C6HgCH(NHC6Hg)CH-(C6Hg)COC6Hg (I), is formed in other, m.p. 1470 (from alcohol), and a substance insoluble in alcohol, m.p. 177-178° (from isoamyl acetate), identical to a compound previously obtained by condensation of benzyl-

G

ideneaniline and benzylphenylketone (II)

CARD:

1/4

COUNTRY CATEGORY

No. 82308 1959, : RZKhim., No. 23 ABS. JOUR.

AUTHOR INST. TITLE

ORIG. PUB.

ABSTRACT : (see Francis, E.J., Chem. Soc., 1900, 77, 1195), which is apparently 1,2,3,4-tetra-phenylazetidinol-2 (III). I is hydrolyzed cont'd by water, aqueous alcoholic HCl on aniline and II; it gives oxime, m.p. 91.5-920 (from alcohol), and when heated with CaHaNHNH, in

alcohol, decomposes into aniline, II and CAHECHO: with phenylisocyanate (IV), from I a derivative of phenylurea is formed, m.p.

2/4 CARD:

COUNTRY G CATEGORY ABS. JOUR. : RZKhim., No.23 1959, No. 82308 AUTHOR INST. TITLE ORIG. PUB. : 165-167° (from alcohol-CH3COOH). By heating with C6H6 in the presence of C2H5ONa, I is ABSTRACT cont'd isomerized into III. The structure of I was confirmed by synthesis from benzalanyl and II (10-12 hours, 60-70°). III decomposes when heated with concentrated aqueous alcoholic HCl into aniline, C6H5CHO, II and a chlorine-containing substance, m.p. 240°, of undetermined structure; it does not react with NH2OH and C6H5NHNH2, and when heated CARD: 3/4 G COUNTRY CATEGORY : RZKhim., No. 23 1959, ABS. JOUR. No.82308 AUTHOR INST. TITLE

ORIG. PUB.

ABSTRACT cont'd

with IV in xylol it gives urethane, m.p. 155.5-157° (from aqueous CH3COOH).-- D. Vit-kovskiy

CARD: 4/4

COUNTRY

Organic Chemistry. Synthetic Organic Chemistry CATEGORY

1959, No. 82327 RZKhim., No. 23 ABS. JOUR. :

Chu Pao-chieh AUTHOR

INST.

Synthesis of Antipyrine TITLE

Yao-hsuch t'ung-pao, Yaoxue tongbao, 1958, ORIG. PUB. :

6, No 12, 565-567

3.72 kg of aniline (15-20 min) and 2.9 kg of ABSTRACT

a solution of NaNO2 (1:1.5) at 7° are added to 12 kg of HCl acid at 4°; after termination of dinitration, 18 kg of NaHSO2 are added, mixed until the appearance of red color of the solution, heated for 5 hours at 600, kg of HCl acid are added, cooled to 15° and 5.6 kg of C6H5NHNH2. HCl are obtained. To 1.34 kg of the latter, 1,000 ml of 25% NaOH are added and heated, the oily layer is separated,

1/3 CARD:

COUNTRY

CATEGORY

1959, No. 82327 : RZKhim., No. 23 ABS. JOUR.

AUTHOR INST.

TITLE

CARD:

ORIG. PUB.

: extracted with benzol, and C6HcNHNHo (I) is ABSTRACT obtained, yield 95.07%, m.p. 157-1620/40-50 cont'd mm. 120 g of CH3COCH2COOC2H5, 20 ml of water and 33 ml of alcohol are added to 100 g of I, heated to 70-80°, cooled after two hours to 40°, left standing for 4 hours at 40-50°, heated for k hours at 80-900, cooled down to

10°, filtered, washed with alcohol and 152.5 g of 1-pheny1-3-methylpyrazolone-5 (II) are

COUNTRY CATEGORY

ABS. JOUR. : RZKhim., No.23 1959, No. 82327

AUTHOR INST. TITLE

ORIG. PUB. :

obtained, m.p. 123-127°. 600 g of II and 480 g of (CH3)2504 are heated to 150° and left standing for 1.5 hours at 195-205°, cooled to 120°, 1,200 ml of 30% NaOH are ABSTRACT cont'd added, heated for one hour at ~1000, the oily layer is separated, extracted with benzol and antipyrine is obtained, yield 84.19%.-- L. Popova

3/3 CARD:

COUNTRY : HUNGARY

: Organic Chemistry. Synthetic Organic Chemistry CATEGORY

: RZKh1m., No. 23 1959, No. 82328 ABS. JOUR.

AUTHOR : Lempert, K.; Breuer, J.; Lempert-Streter, M.

INST. : Hydantoins, Thiohydantoins, Glycogyamidines. Report III. Orientation in the Monobenzyla-TITLE

tion of 5,5-diphenylglycocyamidine

: Magyar kem. folyoirat, 1959, 65, No 4, 142-ORIG. PUB.

145

: No abstract. ABSTRACT See RZhMhim., 1959, No 16, No 57136

1/1 CARD:

COUNTRY GDR

Organic Chemistry. Synthetic Organic Chemistry CATEGORY

ABS. JOUR. : RZKhim., No. 23 1959, No. 82330

Ried, W.; Miller, W. AUTHOR

INST.

Cyclization Reactions with 2-aminobenzo-TITLE and 2-aminonaphtho-imidazoles

J. prakt. Chem., 1959, 8, No 3-4, 132-149 orid. PUB. :

By the condensation of 2-aminonaphtho-(2,131-ABSTRACT

4,5)-imidazole (I), 2-aminonaphtho-(11,21-1,5)-imidazole (II) and 2-aminobenzimidazole (III) with 1,3-dicarbonyl compounds (DCC), the derivatives of naphtho-[2,3-b]-, naphtho-[1,2-b]- and benzo-[b]-(1,4,8)-pyrimidazoles (IV-VI), respectively, were synthesized. 0.1 mole of BrCN is added to the suspension of

0.1 mole of 2,3-diaminonaphthalene in 150 ml of water at 0-50, and left standing for 12-15

1/13 CARD:

COUNTRY CATEGORY

: RZKhim., No. 23 1959, No. 82330 ABS. JOUR.

ROHTUA INST. T ITLE

ORIG. PUB.

: hours at this temperature, then for one day at 20° and for one day at 30-35°; then the solution is heated for 6-8 hours at 90-100°, ABSTRACT cont'd alkalized with NH, OH and I is separated, yield 81%, m.p. 291-293 (decomp.; from water); picrate, m.p. 318-3200 [decomp.; from tetrahydrofuran (VII); hydrochloride, m.p. 296-2980; acetyl derivative, m.p. 342-3440 (decomp.). 0.2 mole of BrCN is added at 0-50 to 0.2 mole of

CARD: 2/13 COUNTRY : CATEGORY :

ABS. JOUR.: RZKhim., No. 23 1959, No. 82330

AUTHOR INST.

ORIG. PUB. :

ABSTRACT cont'd

1,2-diaminonaphthalene or its dihydrochloride in 0.3 l of water, left standing for 10 hours at 0-5°, then for 12-15 hours at 20°, heated for 5 hours at 40-45° and II is obtained, yield 82-87%, m.p. 212-213°. 0.01 mole of I-III and 0.01 mole of DCC in 50-100 ml of xylol are left standing for 1-2 hours at 20°, sometimes in the presence of piperidine or tritan B, then boiled and the product is separated and crystallized from aqueous HCON(CH3)2

CARD: 3/13

COUNTRY : CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82330

AUTHOR INST.

ORIG. PUB.

ABSTRACT cont'd

or aqueous pyridine and the following is obtained (initial substances, duration of reaction in hours and temperature in C, product, yield in percent and m.p. in C are indicated): dibenzoylmethane (VIII), III, 5, 140, 2,4-diphenyl-VI, 79, 263-285 (decomp.); VIII, I, 19, 140, 2,4-diphenyl-IV, 48, 312-315; acetic ether (IX), I, 1, 140, 4-oxy-2-methyl-IV, 93, 352-356 (decomp.)[picrate (P), m.p.

CARD:

山/13.

```
COUNTRY
CATEGORY
ABS. JOUR. : RZKhim., No. 23 1959, No. 82330
AUTHOR
INST.
TITLE
ORIG. PUB. :
                    298-300° (decomp.)]; benzoylacetic ether, I,
ABSTRACT
                    2, 140, 2-oxy-2-phenyl-IV, 86, 370-372; p-nitrobenzoylacetic ether, I, 2, 140, 2-oxy-2-(p-nitrophenyl)-IV, 45, 384-386 (decomp.);
cont'd
                    O-methyl-IX, I, 2, 140, 4-oxy-2,3-dimethyl-IV, 38, 356-358 (decomp.); formylphenyl-IX,
                    I, 1, 140, 4-oxy-3-phenyl-IV, 69, 305-308;
                    diketene, I, 3, 100, 4-oxy-2-methy1-IV, 88,
                    352-356 (decomp.); diketene, II, 4, 100, 4-oxy-2-methyl-V, 86, 338-341 (decomp.);
 CARD:
                    5/13
                                                                         G
 COUNTRY
 CATEGORY
                  : RZKhim., No. 23 1959, No. 82330
 ABS. JOUR.
 AUTHOR
 INST.
 TITLE
  ORIG. PUB.
                   : diketene, III, 2, 100, 4-oxy-2-methyl-VI, 90,
  ABSTRACT
                     298-302 (decomp.) (P, m.p. 235-236°); diethyl ether of acetonedicarboxylic acid, I, 8, 140,
    cont'd
                     4-oxy-2-carbethoxymethyl-IV, 90, 264-266 (decomp.) [hydrazide, m.p. 353-3540 (decomp.)];
                     tetraethyl ether of propanetetracarboxylic acid, I, 4, 140, bis-(2,4-dioxynaphtho-[2,3-b]
                     [1,4,8]-pyrimidazoly1-3)-methane, 50, 366-369
                     (decomp.); ethyl ether (EE) of cyclopentanone-
                     6/13
  CARD:
```

G COUNTRY CATEGORY ABS. JOUR.: RZKhim., No. 23 1959, No. 82330 AUTHOR INST. TITLE ORIG. PUB. ABSTRACT 2-carboxylic-l acid (X), II, 2, 140, 2-oxy-2,3-trimethylene-V, 80, 352-354 (decomp.); cont'd X, I, 2, 140, 2-oxy-2,3-trimethylene-IV, 89, 354-356 (decomp.) [P, m.p. 265-266° (decomp., from C6HgNO2)]; EE of cyclohexanonecarboxylic (XI), I, 5, 140, 4-oxy-2,3-tetramethylene-IV, 87, 344-346 [P, m.p. 320-322 (decomp.; from C6H5NO2)]; benzoylpyruvic acid (XII), I, 3, 140, 2-phenyl-IV, --, 342-347; XII, III, 3, 140, 2-phenyl-VI, 47, 287-290; phenylmalonic *acid CARD: 7/13G COUNTRY CATEGORY 1959. ABS. JOUR. : RZKhim., No. 23 No. 82330 AUTHOR INST. TITLE ORIG. PUB. : ether, I, 3, 140, 2,4-dioxy-3-phenyl-IV, 80, 328-330 (decomp.); ethoxymethyleneacetylacetone, I, 0.5, 140, 2-methyl-3-acetyl-IV, 84, ABSTRACT cont'd 254-256 (decomp.) [2,4-dinitrophenylhydrazone, m.p. 273-274° (decomp.)]; ethoxymethylene-IX, I, 0.75, 140, 2-methy1-3-carbethoxy-IV, 93, 268-270 (decomp.) is hydrolyzed by methanol solution of KOH at 100° into acid, m.p. 341-3430 (decomp.); ethoxymethylenemalonic ether, CARD: 8/13

COUNTRY CATEGORY 1959, No. 82330 ABS. JOUR. : RZKhim., No. 23 AUTHOR INST. TITLE ORIG. PUB. : 1, 2, 140, 2-oxy-3-carbethoxy-IV, 54, 336-ABSTRACT 339 (decomp.); dimethylacetal of β -ketobucont'd tyraldehyde (XIII), I, 2, 140, 2-methyl-IV, 77, 315 (decomp.); XIII, III, 2, 140, 2-methy1-VI, 82, 231-233 (decomp.); \alpha-methyloxy-methyleneacetone, I, 0.5, 100, 2,3-dimethyl-IV, 91, 317-320 (decomp.). The mixture of O.Ol mole of I-III and C.1 mole of DCC in alcohol, with VII or without solvent, is heated and the following are separated (designations CARD: 9/13 G COUNTRY CATEGORY : RZKhim., No. 23 1959, No. 82330 ABS. JOUR. AUTHOR INST. TITLE ORIG. PUB. : and order are the same): acetylacetone, I, 2, ABSTRACT 170-190, 2,4-dimethyl-IV, 79, 283-285; ben-zoylacetone, I, 30, 90, 2-methyl-4-phenyl-IV, cont'd 19, 298-303 (from the filtrate 2-phenyl-4methyl-IV is separated, yield 13%, m.p. 274-278°); diethyl ether of succinylsuccinic acid (XIV), I, 5, 90, 2,14-dioxy-3-carbethoxy-1,4dihydrobenzo-(f)-IV, 81, 375-379 (decomp.); XIV. III. 10, 90, 2,12-dioxy-3-carbethoxy-1,4-CARD: 10/13

G COUNTRY CATEGORY ABS. JOUR.: RZKhim., No. 23 1959, No. 82330 AUTHOR INSI. TITLE ORIG. PUB. : dihydrodibenzo-[b,f][1,4,8]-pyrimidazole, 84, ABSTRACT 285-287 (decomp.) [are hydrolyzed with concont'd centrated HCl at 100° into 2,12-dioxy-1,4-di-hydrodibenzo-[b,f][1,4,8]-pyrimidazole, m.p. 312-3140 (decomp.)]; XI, III, 19, 90. 4-0xy-2,3-tetramethylene-VI, 68, 301-304; EE of cyclohexanone-2-oxalic acid (XV), I, 20 days, 20, 2,3-tetramethylene-4-carbethoxy-TV, 38, 236-238 (decomp.); XV, III, 14 days, 20, 2,3tetramethylene-4-carbethoxy-VI, 71, 173-174; 11/13 CARD: G COUNTRY CATEGORY No. 82330 1959, : RZKhim., No. 23 ARS. JOUR. AUTHOR INST. TITLE ORIG. PUB. : oxymethyleneacetophenone (XVI), III, 10, 90, ABSTRACT 2-phenyi-VI, 61, 287-290; XVI, I, 7, 90, 2-phenyi-IV, 14, 342-347; XVI, II, 10, 90, 2cont'd phenyl-V, 41, 263-264; malonic ether (XVII), I, 0.75, 223, 2,4-dioxy-IV, 92, 359-361 (de-comp.); ethyl-XVII, I, 0.5, boiling, 2,4-dioxy-3-ethyl-IV, 79, 334-336 (decomp.); tri-carbethoxymethylene, I, 5, 90, 2,4-dioxy-8-carbethoxy-IV, 50, 335-340 (decomp.); oxyme-

12/13

COUNTRY : CATEGORY :

ABS. JOUR.: RZKhim., No. 23 1959, No. 82330

AUTHOR: INST.: TITLE:

ORIG. PUB. :

ABSTRACT: thylenecyclohexanone-2 (XVIII), 10, 70, 2,3-cont'd tetramethylene-IV, 91, 258-260; XVIII, II, 7, 90, 2,3-tetramethylene-V, 71, 238-2h0;

XVIII, III, 5, 90, 2,3-te tramethylene-VI,

93, 218-220.-- L. Shchukina

GARD: 13/13

COUNTRY : GDR

CATEGORY : Organic Chemistry. Synthetic Organic Chemistry

ABS. JOUR. : RZKhim., No. 23 1959, No. 82354

AUTHOR : Wannagat, U.; Liehr, W.

INST. : -

TITLE : Hydrazine-Silicon Compounds. II. Mixed Alkylaryl and Silyl-Substituted Hydrazines

ORIG. PUB. : Z. anorgan. und allgem. Chem., 1959, 299,

No 5-6, 341-348

: By the reaction of R3SiCl (I) (R=CH3) with CH3NHNH2, the following were obtained: CH3NH-NHSi(CH3)3 (II) and (CH3)3SiN(CH3)NHSi(CH3)3 (III). From (CH3)2NNH2 and I, (CH3)2NNHSi-(CH3)3 (IV) was obtained and from CH3NHNHCH3 and I, CH3NHN(CH3)Si(CH3)3 (V) was separated. By the interaction of C6H5NHNH2 with I, C6H5-NHNHSiR3 were prepared (VIa-d, where a R=CH3, b R=C2H5, c R=n-C3H7, d R=C6H5). For the

υ 11-02115, υ 11-11 03117, u 11-06115/. 101 0110

CARD: 1/4

ABSTRACT

COUNTRY CAPEGORY ABS. JOUR.: RZKhim., No.23 1939, No. 82354 AUTHOR INST. TITLE ORIG. PUB. : obtained substances, the yield in percent, b.p. in $O(mn, nD, d_{l_1})$, and in parentheses ABSTRACT cont'd temperature in oc are given as follows: II, 99.5, 96-97/760, --, --; III, 95, 73-75/40, 1.3820 (19); 0.77076 (19); IV, 91, 100/760, 1.4018 (22), 0.96585 (20); v, 87.5, 61-63/260, 1.3818 (20), --; VIa, 93, 72-74/0.5, 115-116/12, 1.5409 (19), 0.9768 (20); VIb, 95, 118-120/0.5, 129-130/1, 1.5210 (20), --; VIc. 90, 145.5/1, 1.4918 (20), --; VId, CARD: 2/4 G COUNTRY CATEGORY : RZKhim., No. 23 1959, No. 82354 ABS. JOUR. AUTHOR INST. TITLE ORIG. PUB. : yield 80%, m.p. 82. The attempt at introdu-ABSTRACT cing the second group of SiR3 into V or VI cont'd was unsuccessful. The tendency for condensation with I decreases in the series HoNNH-SiR3>CH3NHWHSiR3>(CH3)2NWHSiR3. In the presence of air, VIb-c is stained blue. To one mole of substituted hydrazine in 30-50 ml of ether under refrigeration, & to 2/3 mole of RaSiOl in 30-50 ml of absolute ether or in

CARD:

COUNTRY :

G

ABS. JOUR.: RZKhim., No. 23 1959, No. 82354

AUTHOR : INST. : TITLE :

ORIG. PUB. :

ABSTRACT cont'd

the case of VI, in C6H6, is slowly added, mixed for 15-25 hours and from the filtrate, after removing the solvent, II-VI are separated. Report I, see RZhKhim., 1959, No II, No 38106.-- S. Ioffe

CARD:

4/4

COUNTRY

: POLAND

G

Y .: Organic Chemistry. Natural Substances and

Their Synthetic Analogs

ABS. JOUR. : RZKhim., No. 23 1959, No. 82390

AUTHOR

: Jedlinski, Z.

INST. TITLE

: Synthesis, Properties and Structure of Certain Esters of Fatty Acids of Methyl-0-D-Glucopy-

ranoside and Methyl- β -D-Glucopyranoside

ORIG. PUB. : Roczn. chem., 1958, 32, No 6, 1257-1268

ABSTRACT

The synthesis of esters of fatty acids and methylglucosides by heating of fatty acids and glucosides at 170-180° in xylol, with azeotropic dehydration, in the presence of the catalyzers ZnO and PbO, is described. It has been shown that the OH-group in C(2) of methylglucosides is acylated selectively; under the action of one mole of acid upon one mole of glucoside, mainly 2,6-cyl derivatives

CARD:

COUNTRY G CATEGORY ABS. JOUR.: RZKhim., No. 23 1959, No. 82390 AUTHOR INST. TITLE ORIG. PUB. ABSTRACT are formed, which is proved by oxidation with HIO₁ and measurement of the specific rotation. The esters obtained, b.p. in C/mm, m.p. in C, n^{2O}D, [x]^{2O}D in chloroform, are enumerated as follows: tetracaproylmethyl-o(-D-glucopyranoside, 180-190/10⁻²-5·10⁻³, --, cont'd 1.4559, $+87.9^{\circ}$; tetracapryloylmethyl- α -Dglucopyranoside, 205-215/10-2-5.10-3, --, 1.4575, +75.1°; tetralauroylmethyl-o-D-glucopyranoside, --, 40-41, --, +61.1; tetra-CARD: 2/3 COUNTRY G CATEGORY ABS. JOUR. : RZKhim., No. 23 1959, No. 82390 AUTHOR INST. TITLE ORIG. PUB. : capryloylmethyl-\$-D-glucopyranoside, --, --, 1.4339 (25°), -6.1° (17°); tetralauroylmethyl-\$-D-glucoside, --; 46-48, --, -5.4° (17°); dicaproylmethyl-\$\alpha\$-D-glucopyranoside, --, --, ABSTRACT cont'd 1.4631, +96.7°; dilauroylmethyl-&-D-glucopy-ranoside, --. 51.5-52.5, --. +73.5°; mono-lauroylmethyl-p-D-glucopyranoside (with admixture of diacyl derivative), --, 53-57, --, -9.1° (17°).-- A. Yurkevich CARD: 3/3

GZECHOSLOVAKIA COUNTRY

Organic Chemistry. Natural Substances and CATEGORY

Their Synthetic Analogs

ABS. JOUR. : RZKhim., No. 23 1959, No. 82397

Stanek, J.; Cerny, M. AUTHOR

INST.

On the Formation of Acetylated Derivatives TIFLE

of Glycosylamines

Collect. Czechosl. Chem. Communs, 1959, 24, ORIG. PUB. :

No 3, 1017-1019

No abstract. ABSTRACT

See RZhKhim, 1958, No 24, No 81741.

1/1 CARD:

: CZECHOSLOVAKIA COUNTRY

: Organic Chemistry. Natural Substances and CATEGORY

Their Synthetic Analogs No. 82414 : RZKhim., No. 23 1959, ABS. JOUR.

: Labler, L.; Cerny, V.; Fajkos, J.; Sorm, F. AUTHOR

INST.

: On Steroids. XXXIII. Holarrhidine, a New Al-TITLE kaloid from Holarrhena antidysenterica Wall.

Labler, L., Cerny, V. XXXIV. The Structure : Collect. Czechosl. Chem. Communs, 1959, 24, ORIG. PUB.

No 2, 370-377, 378-383; No 3, 766-785

: No abstract. ABSTRACT See RZhKhim., 1958, No 24, Nos 81782, 81783;

1959, No 9, No 31508.

of Holarrhidine. Cerny, V., Labler, L., Sorm, F. KXXV. The Synthesis of Epimeric 16-Bromo Derivatives of Androsterone and Testosterone. Fajkos, J., Sorm, F.

CARD:

CZECHOSLOVAKIA COUNTRY

Organic Chemistry. Natural Substances and CATEGORY

Their Synthetic Analogs

ABS. JOUR. : RZKhim., No.23 1959, No. 82428

Vystroil, A.; Cerny, J. AUTHOR

INST.

TITLE. Model Substances of Physostigmine

Collect. Czechosl. Chem. Communs, 1959, 24, ORIG. PUB. :

No 3, 804-808

ABSTRACT

See RZhKhim., 1959, No 4, No 11958.

CARD:

1/1

COUNTRY CATEGORY : CZECHOSLOVAKIA

: Organic Chemistry. Natural Substances and

Their Synthetic Analogs

: RZKhim., No. 23 ABS. JOUR.

1959, No. 82429

AUTHOR

: Mares, F.; Hudlicky, M.

INST.

: Synthetic Experiments in the Allolupinane TITLE Series. V. Synthesis of Allolupinine from

6-(pyridyl-2)-valeric Acid

ORIC. PUB.

: Chem. listy, 1958, 52, No 10, 1933-1936

ABSTRACT

: Comparatively readily available d-(pyridyl-2)valeric acid (I) (RZhKhim., 1958, No 19, No 64479) is an appropriate raw material for the synthesis of allolupinine (II). The synthesis, which gives high yields in most cases, consists in bromination into the X-position, cyclization by the action of Ba(OH)2, hydrogenation, etherification and reduction of the carbethoxyl group of LiAlH . The hydrobromide

CARD:

COUNTRY CATEGORY ABS. JOUR.: RZKhim., No. 23 1959, No. 82429 AUTHOR INST. TITLE ORIG. PUB. : ABSTRACT of I (monohydrate) is obtained after purificont'd cation of I by boiling for 3 hours with skeletal Ni in water, oxidation with 48% of HBr and evaporation, yield 89%, m.p. 118-1190 (from acetone). The product (23 g) is triturated with 5.6 g of red P, while mixing 280 g of Bro are added by drops, heated for 2 hours in a water bath, the mixture is poured into 500 ml of water, evaporated, the residue is alkalized in 500 ml of water with a solu-CARD: 2/6 G COUNTRY CATEGORY : RZKhim., No. 23 1959, No. 82429 ABS. JOUR. AUTHOR INST. TITLE ORIG. PUB. tion of 130 g of Ba(OH) in 2.5 l of water, ABSTRACT saturated with CO2 on the second day, fil-tered, condensed, and Bat 2 is precipitated cont'd with H2SO,; after concentration, the filtrate produced 92% of 1,2-(1'-carboxytetramethylene)-pyridine bromide [m.p. 183-185° (from alcoholether), hygroscopic needles which, after hydrogenation in water over Pt (from PtO2), gave the hydrobromide of quinolysidinecarboxylic-4

3/6

G COUNTRY CATEGORY ABS. JOUR.: AZKhim., No. 23 1959, No. 82429 AUTHOR INST. TITLE ORIG. PUB. acid (III acid), yield 93%, m.p. 282-283° ABSTRACT (from alcohol-ether). An alcoholic solution cont'd of the hydrobromide of III at 0° is saturated with MCl and boiled for 2.5 hours, alcohol is distilled off, the residue is again saturated in alcohol of HCl, left standing for 24 hours concentrated, precipitated in CHCl3 with chloroform solution of NH3 and filtered off. By concentration, 52% of ethyl ether of III is obtained, b.p. 95-97°/4 mm, n²⁰D 1.4781; CARD: 4/6 G COUNTRY CATEGORY : RZKhim., No. 23 1959, No. 821,29 ABS. JOUR. AUTHOR INST. TITLE ORIG. PUB. :picrate, m.p. 127-128° (from chloroform-ether). ABSTRACT The ether obtained by boiling for 1.5 hours cont'd with Lialth in ether gave 94% of II, b.p. 86-870/2 mm, n.p. 48-500 (from petroleum ether), n²⁰D 1.5121; picrate, m.p. 80-81° (from water), after drying, depending on the conditions of melting, up to 115-116°. The second method of synthesis of II was proposed to start by oxidation with SeO2 of 1-(pyridy1-2)-pentanone-4.

5/6

COUNTRY CATEGORY

ABS. JOUR.: RZKhim., No. 23 1959, No. 82429

AUTHOR INST.

TITLE

GRIG. PUB. :

ABSTRACT cont'd

However, the latter proved to be very resistant in respect to SeO2 and, besides the initial ketone, it was not possible to separate another substance. Report IV, see RZhKhim., 1959. No 21. No 75062. -- Jan Kovar

CARD:

6/6

COUNTRY

: CZECHOSLOVAKIA

CATEGORY

: Organic Chemistry. Natural Substances and

ABS. JOUR.

Their Synthetic Analogs RZKhim., No. 23 1959, No. 82430 : RZKhim., No. 23

AUTHOR

: Pitha, J.; Ernest, I.

INST.

TITLE

: Synthetic Experiments in the Allolupinane

Series. VI. Catalytic Hydrogenation of

7-(2-pyridyl)-Ketones

ORIG. PUB. : Chem. listy, 1958, 52, No 10, 1937-1940

ABSTRACT

: The hydrogenation of 5-(pyridyl-2')-pentamone-2 (I) and 5-(pyridyl-2')-pentanol-1one-2 (II) leads stereospecifically to one diasterecisomer of quinclysidine substituted in the position 4, that is, to 4-methyl-(III) or to 4-oxymethylquinolysidine (IV). On the basis of mutual correlation, as well as literary data, the authors assume that the atoms of H under C(h) and C(10) are in the cis-

CARD:

COUNTRY CATEGORY G

G

ABS. JOUR.: RZKhim., No. 23 1959, No. 82430

AUTHOR

INST.

TITLE

ORIG. PUB.

ABSTRACT cont'd

position. If, as it is assumed by Cookson (RZhKhim., 1953, No 6, No 8549), the conformation of quinelysidine is analogous to that of trans-decalin, then the CH2-group in III and CH2OH-group in IV have an equatorial position (regarding nomenclature of. RZhKhim., 1957, No 9, Ho 30809). By the reduction of IV under the action of SOCl2 and hydrogenation into III, the authors established that both substances have a similar configuration.

CARD:

2/7

COUNTRY CATEGORY

ABS. JOUR.

1959, No. 82430 : RZKhim., No. 23

AUTHOR INST. TITLE

ORIG. PUB.

ABSTRACT cont'd

: Likewise, from the products of hydrogenation of 6-(pyridyl-2)-x-ketovaleric acid (V), it was possible to prepare a small quantity of quinolysidinecarboxylic- acid (VI), identical with the acid described in the previous report (see abstract No 82429). Since both IV (substance obtained in the present work, and allolupinine described in the previous report) are identical, the described diaste-

CARD:

G

COUNTRY :

ABS. JOUR.: RZKhim., No. 23 1959, No. 82430

AUTHOR : INST. : TITLE :

ORIG. PUB. :

ABSTRACT contid

recisomer VI also belongs to the X-series. By the hydrogenation of I over Pt (from PtO2) in 0.25 n, HCl, III is prepared, b.p. 76-780/12 mm, n²⁰D 1.4793. II with a yield of 42%, n²⁰D 1.5289, is prepared by reduction of ethyl ether of \$\mathbf{S}\$-(pyridyl-2)-\mathbf{G}\$, \text{diethoxy-valeric acid of LiAlH₁ by boiling for \$\mathbf{I}\$0 min in ether and hydrolysis of the impure product by two-hour standing in 1 n. HCl at 20°. By the hydrogenation of II (as it was shown

CARD:

4/7

COUNTRY CATAGORY G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82430

AUTHOR : INST. : TITLE

ORIG. PUB.

ABSTRACT cont'd

above), 95% oil is obtained which, after chromatography on Al₂O₃, gave IV, m.p. 47.5-49°, n²O_D 1.5118; picrate, m.p. 81° (from water), 121.5-123.5° (after drying in vacuum); hydrochloride, m.p.240° (from petroleum-ether fraction). The ether fraction produced a small quantity of the substance, isomeric IV, with m.p. below 30°, the structure of which was not determined. Hydrochloride of IV is

CARD:

COUNTRY CATEGORY ABS. JOUR.: RZKhim., No. 23 1959, No. 82430 AUTHOR INST. TITLE ORIG. PUB. : heated for 4 hours to 80° with SOCl2 and 68% ABSTRACT of the hydrochloride of 4-chlormethylquino-lysidine, m.p. 242, is obtained which, by hydrogenation in water over Pd/BaSO in the presence of KHCO3, produced 65% of III; pic-rate, m.p. 192.5-1940, a mixed melting tem-perature without depression. The hydrogenacont'd tion of V is effected as was described earlier (see RZhKhim., 1958, No 3, No 7975); from the mother solutions, after crystallization CARD: 6/7 G COUNTRY CATEGORY : RZKhim., No. 23 1959, No. 82430 ABS. JOUR. AUTHOR INST. TITLE ORIG. PUB. : of esters, an ethyl ether, VI (6%), is sepa-ABSTRACT rated chromatographically; picrate, m.p. cont'd 130.5-132°.-- Jan Kovar

7/7

COUNTRY

:

RUMANIA

G

CATEGORY

Organic Chemistry. Natural Substances and

Their Synthetic Analogs

ABS. JOUR. : RZKhim., No. 23

1959, No. 82443

AUTHOR

Kircz, M.; Voinescu, V.; Hendler, E.

INST.

TITLE

On the Synthesis of B-Alanine

ORIG. PUB. :

Rev. chim. (RPR), 1959, 10, No 2, 78-79

ABSTRACT

The preparation of \$-alanine (I) according to the scheme: acrylonitrile - acrylamide (II) - polymer II - I. 106.12 g of acrylonitrile are gradually added to 196 g of 80% H₂SO₁, (+hydroquinone) at 60-80°, heated for about 45 min at 90-100°, diluted with 400 ml of butanol and rofluxed with NH2 up to pH 7, (NH4)2504 is filtered off at 50° and from the cooled filtrate II is obtained, yielding 101 g. The method is suitable for use in

*is described

CARD:

1/3

COUNTRY CATEGORY

ABS. JOUR.

1959, No. 82443 : RZKhim., No. 23

AUTHOR

INST.

TITLE

ORIG. PUB.

ABSTRACT cont'd

: continuous processes. The mixture of 100 g of II, 8 g of the powder of NaOH (or 30 ml of 30% alcoholic solution of tritan B) and 0.05 g of hydroquinone is heated to 70° (after 1-2 min polymerization begins and the temperature rises to 220°), dissolved in 400 ml of 50% H2SO4, boiled for 3 hours, neutralized with Ba(OH), the filtrate is condensed, CH3OH is added to the residue and

CARD:

G

COUNTRY CATEGORY

ABS. JOUR.: RZKhim., No.23 1959, No. 82443

AUTHOR INST. TITLE

ORIG. PUB. :

I is obtained, yielding 65%. For polymeriza-ABSTRACT tion of II, CH3ONa may also be applied .-- S. cont'd

Zav'yalov

CARD:

3/3

COUNTRY CATEGORY : CZECHOSLOVAKIA

: Organic Chemistry. Natural Substances and

Their Synthetic Analogs

1959, No. 82444 : RZKhim., No. 23 ABS. JOUR.

AUTHOR

: Poduska, K.

INST.

TITLE

: Amino-Acids and Peptides. XXIII. Preparation and Chromatographic Behavior of Some N-Methyl

Derivatives of DL-Lysine

ORIG. PUB.

: Collect. Czechosl. Chem. Communs, 1959, 24,

No 3, 1025-1028

ABSTRACT

: No abstract.

See RZhKhim., 1958, No 24, No 81802.

CARD:

: GDR

H

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. General

ABS. JOUR.: RZKhim., No. 23 1959, No. 82472

AUTHOR

: Messing, H.; Barwinkel, O.

INST.

40F

TITLE

: Complex Standardization as a Method of Establishing Indigenous Reserves of the Socialistic

Chemical Industry in the GDR.

ORIG. PUB. : Chem. Technik, 1959, 11, No 3, 116-118

ABSTRACT : No abstract.

CARD:

1/1

COUNTRY

: HUNGARY

H

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Chemical Engineering.

ABS. JOUR.

: RZKhim., No. 23, 1959, No. 82481

AUTHOR

: Lienerth, A.

INST.

· 6 -----

TITLE

: Testing of Equipment for Tightness Operating Under Vacuum in the Chemical Industry

ORIG. PUB.

: Magyar kem. lapja, 1958, 13, No 7-8, 275-278

ABSTRACT

The degree of permiability and tightness of packing materials (asbestos, rubber, asbestos with graphite) was tested on a distillation unit by measuring incremental increase in pressure in the apparata after having them evacuated to a required sub-atmospheric pressure and blocking off the vacuum pump. It was established that pressure builds up proportionally with time, and the quantity of air entering apparata may be determined from the following equation: $\mathbf{z} = (\chi^{60/760}) \mathbf{V} \triangle \mathbf{p}$ gr/Hr, where χ - density of air in gr/m³ (at

CARD:

COUNTRY CATEGORY H

ABS. JOUR. : RZKhim., No. 23 1959, No. 82481

AUTHOR INST. TITLE

ORIG. PUB. :

ABSTRACT Con'd

: 190, 760 mm Hg Abs., at relative humidity of 60%); V - internal volume of an apparatus in m3 . AP - increase in pressure in mm Hg Abs./minute (in the range of 0-160 mm Hg Hbs). -- A. Yermakova.

CARD:

2/2

COUNTRY CATEGORY : CZECHOSLOVAKIA

: Chemical Technology. Chemical Products and Their Applications. Chemical Engineering

ABS. JOUR.

: RZKhim., No. 23 1959, No. 82494

AUTHOR INST.

: Prazak, V.

TITLE

: Precision of the Overall Purification Efficiency Measurments on the Gas Dedusting Installations

ORIG. PUB.

: Sb. Ceskosl. ved. techn. spolecn. zdravotni techn. a vzduchotechn. CSAV, 1958, No 2, 89-*

ABSTRACT

: Reviewed are effects resulting from the measurment method employed and from specific type of apparate used on the determination precision of an installation's overall efficiency. Presented are instructions pertaining to the selection of an appropriate method and of apparata for the determination of dust contained in the air before and after the purification or the quantity of dust tranned from a given volume of gas. -- V. Gertovskiy.

*-102

CARD:

COUNTRY : HUNGARY

CATEGORY: Chemical Technology. Chemical Products and Their Applications. Chemical Engineering ABS. JOUR.: RZKhim., No. 23 1959, No. 82499

AUTHOR : Horanyi, R.

INST.

TITLE : Supercentrifuges Manufactured in Hungary

ORIG. PUB.: Magyar kem. linja, 1959, 14, No 1, 34-36

ABSTRACT : Review. - A. Yermakova.

1/1 CARD:

COUNTRY : GDR

: Chemical Technology. Chemical Products and Their Applications. Chemical Engineering CATEGORY

: RZKhim., No. 23 1959, No. 82500 ABS. JOUR.

AUTHOR : Blauhut, W.

INST. : Development of Equipment Manufacture for Chemical Uses. I. Pumps and Compressors. TITLE

: Chem. Techn., 1959, 11, No 5, 227-236 ORIG. PUB.

ABSTRACT : No abstract.

1/1 CARD:

COUNTRY CATEGORY : CHINA

: Chemical Technology. Chemical Products and

Their Applications. Chemical Engineering.

ABS. JOUR.: AZKhim., No. 28 1959, No. 82510

AUTHOR

: Yuan Li-ch'un

INST.

TITLE

: Calculations of Heat Transfer from Saturated Steam to a Circulating Liquid Under Conditions

of Flow

ORIG. PUB.: Hua haueh shih chieh, 1958, 13, No 5, 214-217

ABSTRACT

: The following equation was derived: [1 + KF/(N2Gc)] Wc $\ln[(T - t_1) / (T - t_2)] =$ EKF 2/N, where t, and to are initial and final temperatures of liquid in degrees; T is temperature of steem in degrees; K - heat transfer coefficient in K cal/m2/Hr/degree; F- heat transfer surface area in m2; W - quantity of liquid in a system in kg; G - liquid circulation rate in Kg/Hr; C - specific heat of the liquid in K cal/Kg; C - duration of heating in hours; $N = A(e^A + 1)/[e^A - 1]$; A = KF/(Gc). Proposed are an analytical and

H

CARD:

1/2

COUNTRY CATEGORY

ABS. JOUR.

: RZKhim., No. 23 1959, No. 82510

AUTHOR

INST.

TITLE

ORIG. PUB.

ABSTRACT Con'd

: graphical methods for the determination of F or T values. It was established that changes in K and F greatly affect the process only when A < 1; when > 4.5 the above changes have practically no effect on the process; the effect of G increases with an increased value of A. -- Sheng Fu.

CARD:

COUNTRY : POLAND : Chemical Technology. Chemical Products and CATEGORY Their Applications. Chemical Engineering 1959, No. 82521 ABS. JOUR. : RZKhim., No. 23 MOHTUA : Michalski, H.; Strumillo, G.; Szapiro, S. IMST. TITLE : Determination Method of Packing Height in Rectifying Columns ORIG. PUB.: Zesz. nauk. Politechn. lodzkiej, 1957, No 16, 3-14 ABSTRACT. : A method for determination packing height is proposed which is based on the results of experiments conducted by the authors on a laboratory installation and suitable for calculations of commercial rectifying columns. A satisfactory correlation of data is established when employing factors obtained by the proposed method as well as data found by the others. A satisfactory correlation exists also with data obtained by the authors in their experiments with different packed columns. CARD: 1/1 : HUNGARY COUNTRY : Chemical Technology. Chemical Products and CATEGORY Their Applications. Chemical Engineering 1959. No. 82528 : RZKhim., No. 23 ABS. JOUR. : Szenesy, L.; Benedek, P. AUTHOR INST. : Design of a Column for Continuous Chromatog-TITLE raphy of Gases (Hypersorber)

ORIG. PUB.

ABSTRACT

: Magyar kem. lanja, 1958, 13, No 10-12, 369-372

: Calculation method for the design of continuous gas chromatography columns is described covering 3 alternate processing schemes: a) for the separation of a binary mixture; b) for the isolation of 3 components from a multi-component mixture; c) for the isolation of 2 components from a multi-component mixture. The method of calculation is based on

the simultaneous use of material balance equations, equilibrium data, and the absorbtion kinetics data. This method permits the determination of the number of theoretical trays

1/2CARD:

COUNTRY CATEGORY H

ABS. JOUR.: RZKhim., No. 23 1959, No. 82528

AUTHOR INST. TITLE

ORIG. PUB. :

ABSTRACT Con'd

: required, the feed point location for gaseous mixtures, reflux ratio, and minimum flow rate for the absorbent (mols of gas flowing at any height of column is assumed to be constant). It has been established that experimental values of concentration for any of the components present in a mixture, obtained through partial oxidation of methane, are in a good agreement with those calculated.

-- A. Yermakova.

CARD:

2/2

COUNTRY CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Chemical Engineering

1959, No. 82538 : RZKhim., No. 23 ABS. JOUR.

AUTHOR

: Beushausen, W.

INST. TITLE

: Fine Particle Grinding and Particle Classi-

fication in the Air Stream

ORIG. PUB.

: Chem. Techn., 1959, 11, No 4, 190-200

ABSTRACT

: The review of design of apparata employed for particle grinding presenting bases for their classification into groups. Presented also are bases for classification of solid particles in the stream of air with information pertaining to the design and construction of certain centrifugal type clas-

sifiers.

CARD:

POLAND

Н

CATEGORY

Chemical Technology. Chemical Products and

Their Applications. Instruments and Automation

1959, No. 82555 ABS. JOUR. : RZKhim., No. 23

AUTHOR

: Milewski, B.

INST.

TITLE

: Control of Chemical Processes With the Use of

Proportioning Pumps

ORIG. PUB.: Chemik, 1959, 12, No 1, 17-19

ABSTRACT

: A brief description of an automatic liquid feeding system for process equipment with the aid of proportioning pumps (PP) (either reciproceting or diaphragm type). The rate control of PP is acheaved directly, eliminating the use of any valving arrangements, simply by changing stroke of PP or by changing rpm of a motor drive. The necessary rate changes (in stroke or rpm) of PP are attained through the use of electrical-pneumatic or hydraulic motors, commonly used in the automatic control technique. These servemeters may be counted

CARD:

1/3

COUNTRY

CATEGORY

ABS. JOUR.

23 1959, No. 82555 : RZKhim., No.

AUTHOR INST.

TITLE

ORIG. PUB.

ABSTRACT Con'd

directly to regulators of any size. In such a system PP becomes receiver of control impulses. With the use of PP it is also nossible to establish an automatic control of reactors fed with several different liquids, supplied at different rates and in different proportions. Such a system employs a single drive that activates a number of PP the stroke of each of which is appropriately adjusted to give a required piston displacement corresponding to the required rate for a given component. By changing speed of rotation of the

CARD:

COUNTRY CATEGORY

H

ABS. JOUR.: RZKhim., No. 23 1959, No. 82555

AUTHOR INST. TITLE

ORIG. PUB. :

ABSTRACT Con'd

: main dive, feed rate of all the components fed are regulated simultaneously, without changing proportion of the components charged.

-- Yu. Skoretskiy

CARD:

3/3

COUNTRY CATEGORY : CZECHOSLOVAKIA

: Chemical Technology. Chemical Products and

Their Applications. Instruments and Automation

: RZKhim., No. 23 1959, No. 82561 ABS. JOUR.

AUTHOR

: Zenaty, G.; Lezatka, J.

INST.

: Automatic Control and Measurment of Feed TITLE

Charged into a Rotary Kiln

ORIG. PUB.

: Stavivo, 1959, 37, No 1, 14-15

ABSTRACT

: For the purpose of maintaining a constant level of solids charge ahead of the bucket elevator, an electrode system, involving a two position control, is being employed. This control operates a motor that activates a device that pinches rubber tube through which the solids are being fed. -- Ye. Stefanovskiy

CARD:

: HUNGARY

H

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Instruments and Automation

1959, No. 82566

ABS. JOUR. : RZKhim., No. 23

AUTHOR

: Ambrozy, A.

INST.

TIPLE

: Electron c Control of Temperature

ORIG. PUB. : Meres es automat., 1959, 7, No 1, 12-19

ABSTRACT.

: A number of alternate schemes of electronic control of temperature are reviewed. These control instruments are built with the use electron tubes as well as with semi-conductor devices. Outimum conditions of thermocouple bridge adjustment made of resistance thermometers are established. -- M. Lyndmirskiy

CARD:

1/1

COUNTRY CATEGORY

: RUMANIA

: Chemical Technology. Chemical Products and Their Applications: Instruments and Automation

ABS. JOUR.

1959, No.82568 : RZKhim., No. 23

AUTHOR

: Campan. T .: Anghelache, D.

INST.

TITLE

: Thermocouples for Measurment of Surface

Temperatures

ORIG. PUB.

: Bul. Inst. politehn. Iasi, 1958, 4,

365-370

ABSTRACT

The described thermocouple has a silver plate between the electrodes of a 0.15 mm thickness, mounted on cork that acts as thermal insulation. The time required to record a measurment is 20 seconds. -- Z. Khaimskiy

: CZECHOSLOVAKIA COUNTRY

: Chemical Technology. Chemical Products and CATEGORY

Their Applications. Instruments and Automation

1959, No. 82571 ABS. JOUR. : RZKhim., No. 23

: Sourek. R.: Recks, A. AUTHOR

INST. : Continuous Recording Colorimetric Analizer TITLE

for the Control of Oxygen Content in the Inert

Gases

ORIG. PUB. : Chem. prumysl, 1959, 9, No 2, 71-75

: Described is a photoelectric colorimeter de-ABSTRACT veloped by the authors for the determination

of O2 in the inert gases. The range of determinations is from 0.002 to 0.03 vol. % 02, sen-

minations is 110m of 0.0005 vol % 02.
sitivity of 0.0005 vol % 02.
-- Ye. Stefanovskiy.

1/1 CARD:

: POLAND

COUNTRY CATIGORY

: Chemical Technology. Chemical Products and Their Applications. Instruments and Automation

: RZKhim., No. 23 1959, No. 82572 ABS. JOUR.

: Kaliszan, J. ROHTUA

: Commercial Instruments for the Potentiometric INST. TITLE

Measurment of oH

: Chemik, 1959, 12, No 1, 46-47 ORIG. PUB.

: A brief review of the structural features of pH measuring instruments. -- Yu. Skoretskiy ABSTRACT

CARD: 1/1

* CZECHOSLOVAKIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Instruments and Automation

ABS. JOUR.: RZKhim., No. 23 1959, No. 82573

AUTHOR

: Fiala, S.

INST.

TITLE

: Measurment and Control of Feed Water pE Values

ORIG. PUB. : Automatisace, 1958, No 10, 328-333

ABSTRACT.

: Description of a scheme and presentation of structural data of the pH measuring and controlling device used on boiler feed water.

-- Ye. Stefanovskiy

CARD:

1/1

COUNTRY

: CZECHOSLOVAKIA

H

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Instruments and Automation

ABS. JOUR.

1959, No. 82574 : RZKhim., No. 23

AUTHOR

: Asman, O.; Vocetka, J.

INST. TITLE : Control Instruments for Low Degree of Automa-

tion.

ORIG. PUB.

: Automatizace, 1959, 2, No 2, 54-57

ABSTRACT

: Presented are flow diagrams and technical characteristics of the simplest two-position level controllers (ball float type) and pressure controllers (diaphragm type), equipped with mercury switch contact points. These instruments are being manufactured by ZPA (commercial control instrument factory in

Praga). -- Ye. Stefanovsky

CARD:

: CZECHOSLOVAKIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Instruments and Automation

ABS. JOUR.: RZKhim., No. 23 1959, No. 82575

AUTHOR

: Ales, P.; Wenig, J.

INST.

: Temperature Controller for Generators TITLE

ORIG. PUB. : Sklar a keramik, 1958, 8, No 11, 336-337

ABSTRACT

: The content of steam in the air supply is controlled automatically by the air-steam mixture temperature that activates a thermostat. The latter is connected into a bridge hook-up, which through an electronic relay. activates a motor driven device that controls

steam flow. -- Ye. Stefanovskiy

CARD:

1/1

COUNTRY

: POLAND

H

: Chemical Technology. Chemical Products and CATEGORY Their Applications. Corrosion. Corrosion *

: RZKhim., No. 23 1959, No. 82597 ABS. JOUR.

AUTHOR

: Durmala, Z.

INST.

: Strength Limits Under Tension at Elevated TITLE Temperatures, "The Rate of Growth" and Oxygen*

ORIG. PUB.

: Prace Inst. odlewn., 1958, (1959), 8, No 1-58

1-31

ABSTRACT

: Certain properties of the following different grades of cast iron (C) have been investigated at elevated temperatures: common gray (CC) modified with ferrosilicon (75% Si) (MC), spherical (SC) and low chromium (LC). It was established that with temperature increase almost with every grade of not annealed C, 6b decreases, with the minimum value occuring in

*Corrosion of Various Grades of Cast Iron Manufactured in the Country, Based on the Investigations Conducted by the Foundry Insti-

tute.

CARD:

*Control.

COUNTRY H CATEGORY ABS. JOUR. : RZKhim., No. 23 1959, No. 82597 AUTHOR INST. TITLE ORIG. PUB. : ABSTRACT : the range of 100-200°. This is followed by an increase of 6h, that reaches its maximum Con'd value at approx. 400° . As temperature is increased above 400° , 6_{b} decreases. The greatest change of 6h is noted in the case of CC and MC at 500-6000, in the case of LC at 600-7000. and in the case of SC the decrease of Sh is observed already at 300°. Actual changes of 6b at temperatures up to 400-450° are insignificant, at 600° Gb decreases by about 50%, at 700° by approx. 85%. The values of Gb for various grades of C that were annealed at 400. 2/6 CARD: F COUNTRY CATEGORY 1959. No. 82597 : RZKhim., No. 23 ABS. JOUR. AUTHOR INST. TITLE ORIG. PUB. ABSTRACT -:500, 600 and 7000 in a normal atmosphere, as a rule, are lower than those of not annealed Con'd samples. The decrease of $\mathfrak{S}_{\mathrm{b}}$ is greater the greater is the annealing temperature. The decrease in Gb can barely be observed for LC, while the behaviour of CC and MC in this respect is almost identical. The values of 6 h for all grades of C, annealed in the at-

CARD: 3/6

mosphere of flue gases, go through a minimum at $200-300^{\circ}$ and a maximum at $400-500^{\circ}$, above 500° G_h falls very rapidly. The greatest drop

CATEGORY :

ABS. JOUR.: RZKhim., No. 23 1959, No. 82597

AUTHOR
INST.
TITLE

ORIG. PUB. :

ABSTRACT Con'D

: of G_b in these instances occurs with SC and the smallest with LC. G_b values after annealing in the atmosphere of flue gases are lower than those for the samples annealed in normal atmosphere. "The rate of growth" of C was observed at temperatures $> 400^{\circ}$. No difference in "the rate of growth" of CC and MC was noted. The effect of annealing atmosphere (flue gases) on the rate of growth was observed only at 700° . Data pertaining to the stability of various C grades against the gas corrosion revealed analogical trends obtained in the study

CARD:

4/6

COUNTRY: H

CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 82597

AUTHOR : INST. : TITLE :

ORIG. PUB.

ABSTRACT

effect of gas corrosion was observed at 700° temperature. Studies of C structures indicated that the degree of "the rate of growth" and of oxidation of C depend on the transition of pearlitic structure into ferritic with simultaneous graphitization. As a result of the conducted study in the temperature range up to 400° it is possible to employ CC and MC, without fearing "the rate of growth" and in so doing to allow a possibility of lowering 6'b by 15%. For services of C at 400-500°

CARD: 5/6

COUNTRY CATEGORY H

ABS. JOUR.: RZKhim., No. 23 1959, No. 82597

AUTHOR

INST.

TITLE

ORIG. PUB. :

ABSTRACT Con'd

; temperatures it is recommended to employ SC and LC with 0.5-0.75% C, at 500-6000 temperatures - LC with Cr content of 1.0-1.5%, and for services at 600-7000 - LC with Cr content of 1.5 - 2.0%. -- V. Levinson.

CARD:

6/6

COUNTRY

: HUNGARY

H

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications Corrosion . Corrosion *

ABS. JOUR.

: RZKhim., No. 23 1959, No. 82608

AUTHOR

: Kis, J.

INST.

TITLS

: Corresion Protection of Pressure Tankage

Employed in Chemical Industry

ORIG. PUB.

: Magyar kem. lanja, 1958, 13, No 3, 84-88

ABSTRACT .

: Principles of design and exploitation of tankage, operating under pressure, the system employed in their technological application and current maintenance are presented. The supersonic method of their testing is considered the best method by the author.

- D. Pyushpeki.

*Control.

CARD:

: CHINA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Corrosion. Corrosion * 1959, No. **826**18

ABS. JOUR. : RZKhim., No. 29

AUTHOR

: Ch'en Hsun-hsiao

INST.

TIPLE

: Protective Coating for Metals (An Alkali-Free

Process)

ORIG. PUB. : Hua haueb shih chieh, 1958, 13, No 11, 508-516

ABSTRACT

. No abstract.

*Control.

CARD:

1/1

COUNTRY

: POLAND

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Corrosion. Corrosion*

ABS. JOUR.

: RZKhim., No. 28 1959, No. 82618

AUTHOR

: Weber. J.

INST.

TITLE

: Study of Non-Scale Forming Solution for Phos-

phatizing.

ORIG. PUB.

: Prace Inst. mech., 1959, 7, No 25, 69-76

ABSTRACT

: Addition of H₂C₂O₄ and its salts into a whos-whatizing (P) bath tends to prevent formation of scale in the P process. Thus obtained films (PF) do not affect mechanical properties of lacquer layers applied over them. The quality of PF deteriorates with the increased concentration of H2C2O4 and the promoter (NaNO3, NaNO2, NaC1O3). The non-scaling solutions may be employed for P of Zn-Al alloys.

*Control.

H

CATEGORY

ABS, JOUR.: RZKhim., No. 23 1959, No. 82618

AUTHOR INST. TITLE

orig. PUB. :

ABSTRACT Con'd

: Such solutions are also applicable for P of Al. Corrosion resistance of PF obtained from non scaling solutions, particularly at elevated temperatures (500), is lower than of PF, obtained from common baths. -- V. Levinson.

CARD:

2/2

COUNTRY

: HUNGARY

H

: Chemical Technology. Chemical Products and CATLGORY Their Applications. Corrosion. Corrosion*

ABS. JOUR.

: RZKhim., No. 23 1959, No. 82620

AUTHOR

: Forrai, M.

INST.

TITLE

: Basic Principles Involved in the Use of Acid-

-Resistant Linings

ORIG. PUB.

: Magyar kem. lapja, 1959, 14, No 1, 29-33

ABSTRACT

: This article reviews the basic methods employed in lining concrete storage capacities: treatment of concrete with specific chemicals (soluble water glass and others), application of special insulating coverings (paraffin, asphalt and others) on the wall surface, covering the insulating layer with ceramic

liners. - D. Pyushmeki

*Control.

CARD:

COUNTRY : POLAND CATEGORY

Chemical Technology. Chemical Products and

Their Applications. Corrosion. Corrosion *

ABS. JOUR.: RZKhim., No. 23 1959, No. 82628

AUTHOR

: Biestek, T.; Web er, J.

INST.

: Accelerated Corrosion Tests of Phosphate TITLE

Films on Steel

ORIG. PUB.: Prace Inst. mech., 1959, 7, No 25, 77-85

ABSTRACT

The results of tests conducted with phosphste films (PF) on steel, obtained from baths of different composition indicate that the corrosion resistance (CR) of PF, covered with protective lacquer layers, increases with increased PF thickness. Superior CR possess PF obtained from solutions of "Mazhef" or "Perkar 2" salts (ZnHPO4 + HgPO4 + Cu salt). PF, obtained from other, including the non-scale forming solutions, possess considerable lower CR.

*Control.

CARD:

1/2

COUNTRY

H

CATEGORY

1959, No. 82628 : RZKhim., No. 23 ABS. JOUR.

AUTHOR INST. TITLE

ORIG. PUB.

ABSTRACT Con'd

:It is noted that thinner PF, for instance those obtained from non-scale forming solutions, have better mechanical properties, as compared to other PF, particularly the adhesive properties. The drop method proved useful only for testing PF of comparatively greater thickness. Of the accalerated testing methods the most rugged and ranid is that performed with the use of a salt chamber, the least rugged - the test performed in humid atmosphere. -- V. Levinson.

2/2

: HUNGARY

CATEGORY

: Chemical Technology, Chemical Products and

Their Applications, Corrosion, Corrosion*

ABS. JOUR.: RZKhim., No. 29 1959, No. 82630

AUTHOR

: Galcso, I.; Nometh, J.

INST.

TITLE

f Methods Employed in the Testing of Acid-Resis-

tent Enamel Coatings

ORIG. PUB. : Magyar kem. lanja, 1959, 14, No 1, 22-28

ABSTRACT

: The authors summarize results of roughly 300 experiments on the determination of corrosion rates of acid-resistant enemel coatings, applied to steel vessels. In these experiments the determinations of weight losses were employed. The degree of errosion as a function of time, temperature, nature and concentration of the reagent and solution off were determined. In addition are described the determination methods for the rate of corrosion of acid-resistant enamel coatings, employed abroad, as

CARD:

1/2

*Control.

COUNTRY

CATEGORY

H

ABS. JOUR.

1959, No. 82630 : RZKhim., No. 23

ROHPUA

INST.

TITLE

ORIG. PUB.

ABSTRACT

Con'd

:composition, chemical and physical properties of acid-resistant enamels. - D. Pyushneki

: CZECHOSLOVAKIA

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Water Treatment. Sewage.

ABS. JOUR.: RZKhim., No. 23 1959, No. 82643

AUTHOR

: Dzido, Z.

INST.

TITLE

: Oxygen Concentration Control in the Feed Water

ORIG. PUB.: Energetika (Ceskosl.) 1958, 8, No 12, 559

ABSTRACT

: A method for continuous determination of Co concentration is described. The apparatus consists of a glass Erlenmeyer flask, corked with a rubber stopper, which is provided with thin tubes, through which water being tested enters and leaves the flask. A small highly polished soft iron cylinder is placed inside the flask. The determination of O2 concentration is made on the basis of the rate of iron corrosion in the investigated and in the control samples of water. -- V. Berenfel'd.

CARD:

1/1

COUNTRY

: POLAND

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Water Treatment. Sewage.

ABS. JOUR.

1959, No. 82649 : RZKhim., No. 23

AUTHOR

: Zarebski, H.; Zmudzinska, S.

INST.

TITLE

: pH Alarm for Recycle Water

ORIG. PUB.

: Chemik, 1959, 12, No 3, 133-134

ABSTRACT

: Described is a somewhat modified scheme against that proposed by the Ural'skiy Scientific Research Chemical Institute. Presen-

ted are results of laboratory tests.

COUNTRY : CZECHOSLOVAKIA CATEGORY

: Chemical Technology. Chemical Froducts and Their Applications. Water Treatment. Sewage. : RZKhim., No. 23 1959, No. 82652

ABS. JOUR. : RZKhim., No. 23

AUTHOR

: Prokupek, K.; Sedlarik, L.; Hos, F.

INST. TITLE

: Sanitary-Hygienic Evaluation of Drinking Water

Used in the Rural Sections of the Gotwald

Oblast.

ORIG. PUB. : Sb. Ceskosl. akad. zemed. ved. veterin. med.,

1959, 4, No 2, 105-114

: No abstract. ABSTRACT

CARD:

1/1

COUNTRY

: HUNGARY

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Water Treatment. Sewage. : RZKhim., No. 23 1959, No. 82672

ABS. JOUR.

AUTHOR

: Hunyady, D.

IMST. TITLE

: Purification of Water Containing Radiosctive

Impurities

ORIG. PUB.

: Magyar epitoiper, 1958, 7, No 8, 360-364

ABSTRACT -

: A review.

: CHINA COUNTRY : Chemical Technology. Chemical Products and Their Applications. Water treatment. Sewage. CATEGORY

ABS. JOUR. : RZKhim., No. 23 1959, No. 82675

: Liu Ting-yong; Liang Wen-chung; Chu Hsiu-ch'an AUTHOR

INST. : Desalting of Water by Ion Exchange Method TITLE

ORIG. PUB. : Kao feng tsa t'ung hsun. 1958, 2, No 4, 232-

: Presented are results of the laboratory in-ABSTRACT

vestigation of the method involving simultaneous ionization of H-OH and employing polystyrol - highly acidic cation and highly al-kalinic anion, bound in 1:2 ratio (by volume).

1/1 CARD:

: HUNGARY COUNTRY

: Chemical Technology. Chemical Froducts and CATAGORY Their Applications. Water Treatment. Sewage.

: RZKhim., No. 23 1959, No. 82682 ABS. JOUR.

:Klamar. E. AUTHOR

INST. : Treatment Problems of Boiler Feed Water TITLE

: Energia es atomtecha., 1958, 11. No 11-12, ORIG. PUB.

709-719

: Presented are specifications for boiler feed ABSTRACT . water, described are piping layouts, illustra-

ted by examples.

1/1 CARD:

COUNTRY : POLAND H

CATEGORY: Chemical Technology. Chemical Products and Their Applications. Water Treatment. Sewage. ABS. JOUR.: RZKhim., No. 23 1959, No. 82683

AUTHOR : Rosner. W.

INST. : Characteristic Impurities in the Boiler Feed TITLE

Water.

ORIG. PUB. : Energ. przemysl., 1959, 7, No 1, 5-11

ABSTRACT : No abstract.

1/1 CARD:

: YUGOSLAVIA COUNTRY : Chemical Technology. Chemical Products and

CATEGORY Their Applications. Water Treatment. Sewage

: RZKhim., No. 23 1959, No. 82684 ABS. JOUR.

: Grbie, P. ROHTUA

INST. : Boiler Feed Water TITLE

: Tehnika, 1959, 14, No 2, Masinstvo, 7, No 2, ORIG. PUB.

32-34

: An elemetary review. ABSTRACT

COUNTRY : HUNGARY Chemical Technology. Chemical Products and Their Applications. Water Treatment. Sewage. RZKhim., No. 23 1959, No. 82697 CATEGORY

ABS. JOUR. : RZKhim., No. 23

: Marth, J.; Muhits, K.; Pato, T.; Parnay, Z. AUTHOR

INST.

Purification of City Effluent Waters With TIPLE

Activated Clay

ORIG. PUB.: Emuletgeneszet, 1958, 7, No 5-6, 239-244

: A review of modern acheavements. ABSTRACT

1/1 CARD:

CARD:

: Chemical Technology. Chemical Products and COUNTRY CATIMORY

Their Applications. Water Treatment. Sewage.

1959, No. 82698 : RZKhim., No. 23 ABS. JOUR.

: Ganczarczyk, J. AUTHOR

: Simplified Method for Purification of Small INST. Volumes of Sewer Water with Activated Clay TITLE

: Gas, woda i techn. sanit., 1958, 82, No 11, ORIG. PUB.

: A method for nurification of sewer water (SW) 437-440 in circulation channels, employed for city ABSTRACT

SW (of small villages having population of 3000-5000 souls) is described. This method permits the purification even of highly concentrated SW. The load on an installation of 100-180 gr BPK5 capacity ner 1 m3 per day; the load per 1 gr of activated clay is 0.03--0.1 gr BPK5 per day; the aeration time is

2.5-3.5 days; the decrease in BPK5 > 90%; the required surface area per person is 1-2m2

H

CATEGORY

ABS. JOUR.: RZKhim., No. 23 1959, No. 82698

AUTHOR INST.

TITLE

ORIG. PUB. :

ABSTRACT Con'd

: the power consumption is 0.8 KWH per 1 kg BPK5; technical manpower requirements are 2-4

manhours per week. -- M. Zdybevska

CARD:

2/2

COUNTRY

: YUGOSLAVIA

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Water treatment. Sewage.

ABS. JOUR.

: RZKhim., No. 23 1959, No. 82703

AUTHOR

: Savic, I.

INST.

TITLE

: New Design for the Commercial Effluent

Stream Pretreatment Installations

ORIG. PUB.

: Iz gradnja, 1958, 12, No 11-12, 20-22

ABSTRACT

: A review of the present situation (employing

German data in particular).

CARD:

: HUNGARY COUNTRY : Chemical Technology. Chemical Products and Their Applications. Water Treatment. Sewage. CATEGORY

ABS. JOUR. : RZKhim., No. 28 1959, No. 82710

: Tihanyi, L. AUTHOR

IMST. : Design of Containers for Storage of Radioac-TITLE

tive Effluent Waters

ORIG. PUB.: Epuletgeneszet, 1958, 7, No 5-6, 199-202

: Presented are formulas and a nomogram. ABSTRACT

1/1 CARD:

: HUNGARY COUNTRY : Chemical Technology. Chemical Products and Their Applications. Water Treatment. Sewage. CATAGORY

: RZKhim., No. 28 1959, No. 82717 ABS. JOUR.

: Mago, I. ROHTUA

1/1

INST. : Purification of Effluent Water from Soda-Lime TITLE

Water Treatment Installations

: Epuletgeneszet, 1958, 7, No 5-6, 234-238 ORIG. PUB.

: Presented are data for design and construction ABSTRACT .

of settlers.

: POLAND

CATEGORY

Chemical Technology. Chemical Products and

Their Applications. Safety and Sanitation

ABS. JOUR. : RZKhim., No. 23 1959, No. 82727

AUTHOR

: Rottengruber, J.

INST.

: Detrimental and Dangerous Substances TITLE

ORIG. PUB.: Ochrana pracy, 1959, 14, No 2, 11-17

ABSTRACT

: Report on the conference of Specialist of the International Bureau of Labor that took place on September 13-24, 1956. The following problems were discussed at the conference: classification of detrimental substances (6 groups: explosive, spontaneously combustible, flamable, poisonous, caustic, radioactive), compilation of the basic list of dangerous substances, which must have special warning markings on packages, discussion of special warning sticker samples, problems pertaining to transportation of dangerous and detrimental

CARD:

1/2

COUNTRY

CATEGORY

ABS. JOUR.

No. 82727 : RZKhim., No. 23 1959,

ROHTUA

INST.

TITLE

ORIG. PUB.

ABSTRACT Con'd

: substances, preparation of instructions regarding the handling of dangerous substances, and others. Presented is the list of dangerous substances, developed at the conference, and samples of warning markings, which were approved by the OON commission in 1958.

-- T. Brzhevskaya

POLAND

CATEGORY

Chemical Technology. Chemical Products and

Their Applications. Safety and Sanitation

ABS. JOUR.: RZKhim., No. 23 1959, No. 82735

AUTHOR

Szmaj. E.

INST.

TITLE

Effect of Glass Dust on Human Organism

ORIG. PUB.: Ochrana pracy, 1959, 14, No 3, 13-16

ABSTRACT

: See Ref. Zhur .- Khimiya, 1959, No 15, 53870

CARD:

1/1

COUNTRY

: CZECHOSLOVAKIA

H

CATEGORY

: Chemical Technology. Chemical Products and

Their Annlications. Safety and Sanitation

ABS. JOUR.

1959, No. 82739 : RZKhim., No. 23

AUTHOR

; Ubl. Z.

INST.

TITLE

: Integrational Method of SO, Determination in

the Air

ORIG. PUB.

: Ceskosl. hyg., 1959, 4, No 1, 49-54

ABSTRACT

: Soxhlet extraction tubes were employed for the absorption of SO2. The tubes measured 25 × 100mm and were filled with the solution consisting of (parts): 1-anhydrous K2CO3, 1-water, 2-glycerin of 1.26 specific gravity. The tubes were secured in a holder and were exposed for 3-7 days. Contents of the tubes were then analyzed. Filtrate, resulting from the H2O2 addition was neutralized with a weak MCl employing methyl orange followed by oxidation with concentrated HCl. SO2 was

CARD:

H COUNTRY CATEGORY

ABS. JOUR. : RZKhim., No. 23 1959, No. 82739

AUTHOR

INST. TIPLE

ORIG. PUB. :

: determined as sulfate formed upon the addition ABSTRACT

of 10% BaCl2. -- Ye. Stefanovskiy Con'd

2/2 CARD:

: GDR COUNTRY

: Chemical Technology. Chemical Products and Their Applications. Safety and Sanitation : RZKhim., No. 23 1959, No. 82745 CATEGORY

ABS. JOUR.

: Garten, H. AUTHOR

INST. : A Protective Device for Hydraulic Presses TITLE

Employed in the Plastics Industry

: Plaste und Kautschuk, 1959, 6, No 2, 56-57 ORIG. PUB.

: Described is a device resembling a guard ABSTRACT lattice employed for the prevention of acci-

dents involving the hands. -- A. Semenova.

1/1 CARD:

COUNTRY CATEGORY : HUNGARY

: Chemical Technology. Chemical Products and Their Applications. Safety and Sanitation

ABS. JOUR. : RZKhimil No. 23

1959, No. 82752

AUTHOR '

: Beke, B.

INST. TITLE

Dust Removal Problems Encountered in the

Hungarian Cement Plants

ORIG. PUB. :

Energia es atomtechn., 1958, 11, No 11-12,

742-745

ABSTRACT

: Listed are measures involved in the elimination of dust at coment plants, pointing out the equipment cost for the dedusting of rotary kilns comprizes 10-15% of the kiln cost. The loss of valuable materials through the excessive dust on the cement plant in Hungary represents approximately 15% of the kiln charge, which is the result of low caloric value of fuel used (4400-5400 kcal/kg). For the purpose of utilizing the collected dust it is recommended to recycle it back into the kiln. The bibliography covers 8 titles .-- D. Pyushpeki

1/1 CARD:

COUNTRY CATEGORY

: CZECHOSLOVAKIA

: Chemical Technology. Chemical Products and Their Applications. Safety and Sanitation

ABS. JOUR.

1959, No. 82754 : RZKhim., No. 23

AUTHOR

: Spurny, K.

INST.

TITLE

: A Device for Measuring Aerosol Concentration

ORIG. PUB.

: Pracovni lekar., 1959, 11, No 4, 197-203

ABSTRACT

: The method is based on darkening of the filter paper surface when passing serosol through it. The intensity of color is then compared visually with standard samples. Experiments that established concentration of solid particles in aerosol were conducted on smoke derived from the combustion of coal and coke. Experiments demonstrated applicability of the method when the deposition of solid particles on the filter ranged from 0.008 to 0.425mg/cm2 For the purpose of improving accuracy and

CARD:

COUNTRY CATEGORY ABS. JOUR.: RZKhim., No. 28 1959, No. 82754 AUTHOR INGT. TITLE ORIG. PUB. : ABSTRACT extending limits of the device (that comprizes a round filter); it was divided into 4 sec-Con*d tions, each one having different hydraulic resistance. This was acheaved by providing porous lavers of different thickness. The resistance of each section was made to decrease in peometrical progression from the periphery to the center. Operation of the filter when based on the air rates obtained from previous experiments (the quantity of air passing through each section for a given interval of time) and on the degree of darkening, produces CARD: COUNTRY CATIGORY ABS. JOUR. : RZKhim., No. 23 1959. No. 82754 ROHTUA INST. TITLI ORIG. PUB. : accurate results, and permits establishing ABSTRACT Con'd

the concentration of solid particles present in aerosols. This method may also be employed for the determination of concentration of microorganisms, gases and vanors in the air. In the latter case, a reaction should take place on the surface of filter paper with an appropriate change in color .-- V. Berenfel'd.

H

H

CARD:

: HUNGARY

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Safety and Sanitation

ABS. JOUR.: RZKNim., No. 23 1959, No. 82758

AUTHOR

: Fonyad, T.

INST.

TITLE

: Problems in the Design of Industrial Air Conditioning Installations. Part III. Structural

Aspects of Air Conditioning Equipment

ORIG. PUB.: Epuletgepeszet, 1958, 7, No 5-6, 215-229

ABSTRACT

: Described is the solution of structural aspects of air conditioning equipment employed at a weaving factory that houses 39000 spindles and has an area of 10,000 m². The installation comprized of 6 units with the total capacity of 600,000 m3/hour. All the units were controlled from a central point. For Part II see Ref. Zhur.-Khimiya, 1958, No 24, 82191. The bibliography includes 7 references.

-- D. Pyushpeki.

CARD:

1/1

COUNTRY

: HUNGARY

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Safety and Sanitation

ABS. JOUR.

: RZKhim., No. 23 1959, No. 82759

AUTHOR

: Forster, T.

INST.

TITLE

:Individual Air Conditioning Units "Miniklima"

ORIG. PUB.

:Enuletgeneszet, 1958, 7, No 5-6, 248-251

ABSTRACT

Description of air conditioning system and

equipment for individual quarters.

-- D. Pyushneki.

: CZECHOSLOVAKIA

CATEGORY

t Chemical Technology. Chemical Products and

Their Applications. Elements. Oxides. Mineral* ABS. JOUR.: RZKhim., No. 23 1959, No. 82775

AUTHOR

: Klimecek. R.

TITES

; Absorbtion of SOp in Water Suspensions of Zinc

Hydroxide and Zinc Bisulfite

ORIG. PUB.: Chem. prumysl. 1959, 9. No 2, 57-62

ABSTRACT

: The absorbtion process involving small quantities of SO2 (0.3 vol.%) present in the effluent gas stream from the H2SO₄ contact process was investigated employing Zn(OH)₂+Zn(HSO₃)₂. The absorbtion process is presented in the form of a physical SO2 absorbtion dissolution of 2n(OH)2, and a chemical reaction involving: $Zn(OH)_2 + SO_2 + H_2O \longrightarrow ZnSO_3 + 2H_2O$. The

*Acids, Bases, Salts.

CARD:

1/4

COUNTRY CATEGORY H

ABS. JOUR.

: RZKhim., No. 23 1959, No. 82775

AUTHOR

INST.

TITLE

ORIG. PUB.

ABSTRACT Com'd

: formed bisulfate reacts with 2n(OH)2 in accordance with the reaction: Zn(HSO3)2 + Zn(OH)2--> 2ZnSO3 + 2H2O. The overall absorbtion rate is determined from the rate of Zn(OH)2 dissolution. Experiments were conducted in un-packed columns having crossectional areas of 0.5 and 1.1 m2, and introducing absorbent through sprays. A portion of the suspension is removed from the column bottom and is recirculated in an amount resulting in the overall solution composition of Zn(OH)2 + ZnSO3 · 2.5H2O.

CARD:

COUNTRY : CATEGORY :

ABS. JOUR. : RZKhimi, No. 23 1959, No. 82775

AUTHOR: INST. : TITLE:

ORIG. PUB. :

Con'd crystals to the suspension results in an increased rate of Zn(OH)2 dissolution reaction, that increases, in its turn, the rate of SO2 absorbtion reaction. Presented are equations for the determination of the number of transfer units as a function of gas volume. SO2 content, reflux density, quantity of SO2 present in the inlet and outlet gas streams, SO2 content in the absorbing solution and phase equilibrium constants. It is noted that the diffusion through liquid film is negligible

H

CARD: 3/4

COUNTRY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 82775

AUTHOR : INST. : TITLE :

ORIG. PUB. S

ABSTRACT : in comparison with the diffusion through con'd gaseous phase. -- V. Barenfel'd.

CARD: 4/4

: RUMANIA

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Elements. Oxides. Mineral*

: RZKhim., No. 23 1959, No. 82779 ABS. JOUR.

AUTHOR

: Bota, T.; Tomsa. G.

INST.

TITLE

: Increased Productivity of the Ammonia Synthesis

ORIG. PUB. : Rev. chim. (RPR), 1959, 10, No 3, 154-157

ABSTRACT

: The bottlenecks existing individually in the copper-ammonium purification and in the NH3 synthesis are indicated. Described are means through which the productivity of the plant

was increased by 75%.

*Acids, Bases, Salts.

CARD:

1/1

COUNTRY CATEGORY

: RUMANIA : Chemical Technology. Chemical Products and

Their Applications. Elements. Oxides. Mineral*

: RZKhim., No. 23 1959, No. 82781 ABS. JOUR.

AUTHOR

: Constantinescu. M.

INST.

TITLE

: Intensification of the Gas Purification (COoRemoval) for Ammonia Synthesis.

ORIG. PUB.

: Rev. chim. (RPR), 1959, 10. No 3, 151-153

ABSTRACT

: It was established that in comparison with the copper-ammonium carbonate solution the copper--ammonium formate solution (with Cu+) nossesses greater absorptive canacity (by 60%). The absorptive capacity may be increased further

by lowering temperature to 00.

*Acids, Bases, Salts.

CARD:

COUNTRY : Poland : Chemical Technology. Chemical Products and CATEGORY Their Applications. Elements. Oxides. Mineral* : RZKhimi, No. 23 1959, No. 82794 ABS. JOUR. : Akerman, K.; Zmudzinski, B.; Godula, R. AUTHOR INST. : Derivation of Aluminum Oxide Through Leaching TITLE of Loose Aluminum Containing Slags with Soda Solutions. ORIG. PUB. : Arch. hutn., 1958, 3, No 4, 255-285 . Slags derived from agglomerate calcination in ABSTRACT a rotary kiln or (in an hearth type roasters) of clayey raw materials with anhydrite and limestone containing in the first and second instances respectively (in wt%): Al203 - 15-17 and 23 - 26; CaO - 55-57 and 50-52; SiO2 -18-20 and 13 - 15; 70 - 90% of the derived slag pass through the 0.06 mm mesh sieve. Investigations conducted on a semi-commercial scale in the batch type operation revealed that after two *Acids, Bases, Salts. CARD: 1/2 H COUNTRY CATAGORY 1959, No. 82794 : RZKhim., No. 23 ABS. JOUR. AUTHOR INST. TITLE ORIG. PUB. : stage leaching with soda solution approxima-ABSTRACT tely 85% Al203 can be recovered. The leaching Con'd process proceeds without difficulty as the solids tend to settle rapidly. Plugging up of pumps and lines was not noted. The unreacted solids are suitable for the manufacture of cement. Optimum conditions for the precipitation of NaHCO3Al(OH)3 were also established. The obtained Al203 contained the following impurities (in wt.%): SiO2 - 0.00 -0.15, $Fe_{2}0_{3} - 0.01 - 0.20$, $Na_{2}0 - 0.60$, $Ca_{2}0 - 0.00$.

CARD:

2/2

The bibliography covers 12 references.

H

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Elements. Oxides. Mineral* RZKhim., No. 23 1959, No. 82795

ABS. JOUR. : RZKhim., No. 23

AUTHOR

: Akerman, K.; Zmudzinski, B.; Dietze, S.; Sakala

INST.

TITLE

: Derivation of Aluminum Oxide by the Continuous

Leaching of Aluminum Containing Crushable

Slags with Soda Solution

ORIG. PUB.: Arch. hutn., 1958, 3, No 4, 287-304

ABSTRACT

: Developed were the method and pilot plant equipment for leaching of slags baving composition indicated in the preceeding article. The slags contained leachable Ca aluminates of the 12 CaO . 7Al2O3 type. The leaching operation was conducted continuously in 2 stages. In the first stage leaching was acheaved with the solution leaving the second stage and containing NaHCO3, NaAlO2 and impurities. In so doing a certain quantity of Si was also

*Acids, Bases, Salts.

CARD:

1/3

COUNTRY

CATEGORY

ABS. JOUR.

: RZKhim., No. 23 1959, No. 82795

AUTHOR

INST.

TITLE

ORIG. PUB.

ABSTRACT.

Con'd

: removed. After the filtration the filtrate was subjected to carbonation in a special apparatus. A portion of Na₂CO₃ solution obtained in the precipitation of Al(OH)3 was treated in the CO2 scrubbers. NaHCO3 solution effluent from scrubbers was used for the precivitation of Al(OH)3 in the first leaching stage. Solid residue from the first leaching stage was treated in the second reactor with the remaining NaHCO3 solution. The total Al2O3 extracted ranged from 75 to 90%. The remaining solids after the extraction had "Kule's" modulus

CARD:

Ħ

COUNTRY CATEGORY

ABS. JOUR.: RZKhim., No. 23 1959, No. 82795

AUTHOR INST. TITLE

ORIG. PUB. :

: of 90-100 and were suitable for the direct ABSTRACT manufacture of cement. The bibliography in-Con'd cludes 5 titles.

CARD:

3/3

COUNTRY CATEGORY : BULGARIA

: Chemical Technology. Chemical Products and Their Applications. Catalysts and Sorbents.

: RZKhim., No. 23 1959, No. 82846 ABS. JOUR.

AUTHOR

: Tatarskiy, A.

INST.

: Postbility of Drying Vanadium Catalyst While TITLE Heating and Passing Air over It.

ORIG. PUB.

ABSTRACT

: Khimiya i industriya (Bulg.), 1958, 30, No 5, 153-154

: It has been established that for drying vanadium catalyst it is possible to employ undried air. In the blowing of spent catalyst or of fresh catalyst, that has not been in use for a prolonged period of time, it has to be heated up to 350° followed by blowing with ordinary air. -- V. Matveyev.

CARD:

. RUMANIA

H

11

CATEGORY

Chemical Technology. Chemical Products and

Their Applications. Electrochemical Industries

ABS. JOUR. : RZKhim., No. 28 1959, No. 82858

AUTHOR

: Creanga, G.; Bunus, F; Burnei, M.; Neumann, **

INST. TITLE

: Application of Vertical Decomposers in the

Electrolysis of Sodium Chloride

ORIG. PUB. : Rev. chim., 1958. No 7-8, 370-373. Discut..373

ABSTRACT

: The apparatus consists of a vertically mounted cylinder with a convex bottom, devided into 4 vertical sections. Wire baskets are fitted inside these sections. They are filled with granulated granhite (2.5 cm in diameter), preactivated with iron salts (FeSO4, FeCl2) at 800° temperature. Diameter of the cylider is 480 mm, height is 1200 mm, load is 10,000 a. Amelgam effluent from the cell is moved into

*Electroplating. Galvanic Cells. **F.; Mihalcescu, S; Petcu, I.; Poltoratchi, V.

CARD:

1/2

COUNTRY

CATEGORY

: RZKhim., No. 23 1959, No. ABS. JOUR.

AUTHOR

INST.

TITLE

ORIG. PUB.

ABSTRACT : Con'd

:a decomposer, from which Hg flows by gravity into the electrolytic cell. The use of vertical decomposers permitted the reduction of Hg quantity contained in the baths from 1037 to 579 gr. -- N. Kirichenko.

CARD:

: YUGOSLAVIA COUNTRY

: Chemical Technology. Chemical Products and Their Applications. Electrochemical Industries. CATEGORY

1959, No. 82863 ABS. JOUR. : RZKhim., No. 23

ROHTUA

: Mladenovic, S.

INST.

: Treating Baths for Deciling TITLE

ORIG. PUB. : Zast. mater., 1958, 6, No 11, 455-457

ARSTRACT

: A review. Presented are compositions of bath's solutions for the chemical and electrochemical deciling of Fe, steel, Cu and its alloys, Al and its alloys, Sn, Pb, Mg and its alloys together with treating conditions. -- G. Kossyiy

*Electroplating. Galvanic Cells.

CARD:

1/1

COUNTRY CATEGORY : HUNGARY

: Chemical Technology. Chemical Products and Their Applications. Ceramics. Glass. Binding*

ABS. JOUR.

1959, No.82904 : RZKhim., No. 23

AUTHOR

: Arkosi, K.; Barna, J.

INST. TITLE

: Study of Hungarian Kaolins with the Aid of

Electron Microscope

orig. PUB.

: Epitoanyag, 1959, 11, No 1-2, 32-33

ABSTRACT

: No abstract.

*Materials. Concrete.

CARD:

: HUNGARY

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Ceramics. Glass. Binding*

ABS, JOUR.: RZKhim., No. 28 1959, No. 82905

AUTHOR

: Juhasz, Z.

INST.

TITLE

: Study of Segilongskiy Kaolin

ORIG. PUB. : Epitoanyag, 1959, 11, No 1-2, 17-27

ABSTRACT

: In the study of Segilongskiy kaolin used for the manufacture of refractories for the reduction of cracking tendency, occuring at 9000. it is proposed to add 20% illite to the raw

mix.

*Materials. Concrete.

CARD:

1/1

COUNTRY

: HUNGARY

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Ceramics. Glass. Binding*

ABS. JOUR.

: RZKhim., No. 23 1959, No. 82908

AUTHOR

: Varju, G.

INST.

TITLE

: Conditions Under Which Fire-Resistent Clays of the Pilish Mountain Region Were Formed and Technological Characteristics of the Clay.

ORIG. PUB.

: Banyasz. kutato, int. kozl., 1957, 2, No 2,

133-140

ABSTRACT -

: No abstract.

*Materials. Concrete.

CARD:

: POLAND

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Ceramics. Glass. Binding* ABS. JOUR.: RZKhim., No. 23 1959, No. 82910

AUTHOR

: Pawlikowski. S .: Pollo. I .: Starczewski, M.

INST.

TITLE

: Investigation of a Possibility of Employing

Indigenous Andesite in the Manufacture of

Acid-Resistent Solutions.

ORIG. PUB.: Przem. chem., 1959, 38, No 2, 105-107

ABSTRACT

: No abstract.

*Materials. Concrete.

CARD:

1/1

COUNTRY

: CZECHOSLOVAKIA

H

CATEGORY

: Chemical Technology. Chemical Products and Their Amplications. Ceramics. Glass. Binding* RZKhim., No. 23 1959, No. 82912

ABS. JOUR.

: RZKhim., No. 23

ROHTUA

: Pospisil, Z.

INST.

TITLE

: Bases of pH Measurment of Ceramic Masses and

of Raw Materials.

ORIG. PUB.

: Sklar a keramik, 1959, 9, No 3, 78-80

ABSTRACT

: On the basis of investigations performed by the Scientific Institute of Electrochemical Ceramics (Gradec-Kralevo, Czechoslovakia) described is the pM determination method recommended for routine laboratories of ceramic plants. In the measuring pH the concentration of solids should be in the range of 5-15%, dry basis. For the pH control the use of potentiometric electronic pR meter "Multoscope

*Materials. Concrete.

CARD:

COUNTRY H CATEGORY ABS. JOUR.: RZKhim:, No. 23 1959, No. 82912 AUTHOR IW37. TITLE ORIG. PUB. : : III" is recommended. It is based on the devi-ABSTRACT Con'd ation of anode current principle detected on the grid of an electron tube. The accuracy of a determination is 2 0.1 ph. A more accurate instrument (* 0.01 pH) is the electronic pM--meter, based on the principle involving the compensation of voltage. Both instruments may be used for pll measurment with the aid of a glass electrode, having sufficient accuracy or with a hydrogen electrode. The former one is more convenient in handling. For the neriodic check of the pH meters it is recommended CARD: 2/4 1 COUNTRY CATEGORY ABS. JOUR. : RZKhim., No. 28 1959, No. 82912 ROHTUA INST. TITLE ORIG. PUB. to use 2 standard solutions for the duration ABSTRACT of one to several weeks. Such solutions Con'd should be capable of maintaining constant pH. of these solutions (pH of 4.62 at 200) consists of 50 cm3 of 1 n. CH3COOH, neutrelized with NaOH (using thymol blue as indicator) until the solution turns green; to the solution are then added 50 cm³ of ln. CH₃COOH,

GARD: 3/4

diluted with distilled water up to 500 cm³ volume. The second solution is prepared in the following manner: 0.999 gr of dried Na₂CO₃ + 1.175 gr Na₂O • 2 B₂O₃ are dissolved in 250cc

COUNTRY CATEGORY H

ABS. JOUR.: RZKhim, No. 23 1959, No. 82912

AUTHOR INST. TITLE

ORIG. PUB. :

ABSTRACT Con'd

: water. At 200 pH of the solution is 10.0. The methods of measuring with the use of indicators are less accurate than the potentiomet-ric method, since the introduction of indicators as such changes pH of the solids. --

-- S. Glebov

CARD:

4/4

COUNTRY

: CZECHOSLOVAKIA

: Chemical Technology. Chemical Products and CATEGORY Their Applications. Ceramics. Glass. Binding*: RZKhim., No. 23 1959, No. 82933

ABS. JOUR.

AUTHOR

: Stebel, F.

INST. TITLE

: Production of Refractories With Increased

Al203 Content

ORIG. PUB.

: Hutn. listy, 1959, 14, No 3, 273-276

ABSTRACT

: Presented is the experience in the production of stopper from a mass, having 20% Al203 added to the diluent, with subsequent A1203 addition to the binding agent. This experience extends to the production of refracory bricks employed for the protection of covers of the heating ducts and regeneration chambers of Martens' furnaces. The above articles are noted for improved refractory properties and mechanical strength at elevated temperatures.

*Materials. Concrete. 1/1

CARD:

: HUNGARY

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Ceramics. Glass. Binding*

ABS. JOUR. : RZKhim., No. 23

1959, No. 82953

AUTHOR

: Albert, J.

INST.

TITLE

: Pearled Insulating Materials Employed in the

Ceramics Industry

ORIG. PUB. : Epitoanyag, 1959, 11, No 1-2, 1-16

ABSTRACT

: Study of "Pearlite" and its applications as insulating material in the manufacture of ce-

ramics, usable at 900-1350° temperatures.

*Materials. Concrete.

CARD:

1/1

COUNTRY

: POLAND

H

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Ceramics. Glass. Binding*

ABS. JOUR.

: RZKhim., No. 23 1959, No. 82958

ROHTUA

: Zaboklicki, W.

INST.

TITLE

: Study of Hydrocyclones in the Enrichment of

Indigenous Kaoling

ORIG. PUB.

: Szklo i ceramika, 1959, 10, NO 3, 80-82

ABSTRACT -

: A detailed description of commercial experiments performed on the wet enrichment of Beleslevetzkiy (mined at "Mariya", Vrotslavskiy district, PDR) with the use of hydrocyclones (HC), operating at the porcelain factory imeni Revolyutsiya 1905 in Vrotslavsk. The enriched kaolin fully met the required specifications and conformed with technical conditions for quality and was found suitable for the ceramic and paper industries. The

*Materials. Concrete.

CARD:

COUNTRY : CATEGORY :

ABS. JOUR.: RZKhim., No. 23 1959, No. 82958

AUTHOR : INST. : TITLE :

ORIG. PUB. :

ABSTRACT : obtained results with regard to enrichment of con'd kaolin with the use of HC are employed as basis in the design of a kaolin enriching plant to be located at the "Mariya" mine. --S.Glebov.

H

CARD: 2/2

COUNTRY : POLAND

CATEGORY : Chemical Technology. Chemical Products and Their Applications. Ceramics. Glass. Binding*

ABS. JOUR. : RZKhim., No. 23 1959, No. 82959

AUTHOR : Augustyn, D.

INST. :TITLE : Brown Coal Humic Acids as Cutters for Ceramic

Masses

ORIG. PUB. : Prace Glown. inst. gorn., 1957, B, No 192,

8s., il.

ABSTRACT : Investigation of a possibility of employing ammoniatal solutions of humic acids, derived

from brown coal, as cutting agents for high-

-quality ceramics.

*Materials. Concrete.

CARD: 1/1

: YUGOSLAVIA

CATEGORY

: Chemical Technology. Chemical Products

Their Applications. Ceramics. Glass. Binding*

ABS. JOUR.: RZKhim., No. 28 1959, No. 82987

AUTHOR

: Bojovic. P. Ristic. M.

INST.

TITLE

: Investigation of Glass and Ceramics with the

Aid of Radioactive Isotones

ORIG. PUB. : Tehnika, 1959, 14, No 2, Hem. ind., 13, No 2,

25-28

ABSTRACT

: Radioactive isotones were employed as emanation sources and as indicators in the establishment of the reaction constants, in the investigation of certain ions' diffusion rates in the glass, in the study of surface flow characteristics of glass masses contained in tub ovens, in the control of glazings' application on ceramic objects, etc. -L. Sedov.

*Materials. Concrete.

CARD:

1/1

COUNTRY

1 CZECHOSLOVAKIA

: Chemical Technology. Chemical Products and CATEGORY Their Applications. Ceramics. Glass. Binding*

ABS. JOUR.

1959, No. 82991 : RZKhim., No. 28

AUTHOR

: Spitz. T.

INST. TITLE

the Use of Sodium Sulfate

ORIG. PUB.

: Sklara keramik, 1959, 9, No 2, 35-39

ABSTRACT -

: The effect of sodium sulfate on melting and clarifying of glass masses, used in the production sheet glass was studied employing the static and dynamic weight thermal analyses method, the differential thermal method, the method involving measurment of the wetting angle of sand by the glass mass and observations of the conical samples'deformation. It was found that at temperatures up to 9000 small dosages of sodium sulfate added do not

: Melting and Clarifying of the Glass Mass with

*Materials. Concrete.

CARD:

H

CATEGORY

ABS. JOUR.: RZKhim., No. 23 1959, No. 82991

AUTHOR

INST.

TITLE

ORIG. PUB. :

ABSTRACT

: affect the rate of reaction. Molten sulfate promotes wetting of sand grains with glass mass. The optimum Na20 content in sulfate for clarification comprizes 0.3%, whereby in an oxidizing atmosphere the process proceeds most favorably. The bibliography covers 15 references. - L. Sedov. :

CARD:

2/2

COUNTRY

: ROUMANIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Ceramics. Glass. Binding* RZKhim., No. 23 1959, No. 83001

ABS. JOUR.

: RZKhim., No. 23

AUTHOR

: Popovici, N.; Grigoriu, A.

INST. TITLE

: Determination of Quality of Glassware Manufac-

tured in Rumania

ORIG. PUB.

: Rev. chim. (RPR), 1959, 10, No 12, 115-117

ABSTRACT

: Results of the determination of chemical stability of glass ampoules with respect to water acid and alkali. It was established that the tested amooules are chemically stable with respect to water and acid but are less sta-

ble to the action of alkali.

*Materials. Concrete.

CARD:

: POLAND

H

83004

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Ceramics. Glass. Binding*

ABS. JOUR.: RZKhim., No. 28 1959, No. 83004

AUTHOR

: Gollenhofer, A.

misi.

TITLE

: Indigenous Production of Cast Ladle Used for

Melting of Ontical Glass

ORIG. PUB.: Szklo i ceramika, 1959, 10, No 2, 44-48

ABSTRACT

: The production of ladles for melting of optical glass has been started in Poland. Ladles are manufactured employing casting technique in gynsum forms reinforced by steel frames. A mixture prepared in Verner's mixer is poured into forms, leaving it there for 6-8 days to set. After the removal from forms ladles are dried at 25-30° temperature and at a relative bumidity of 60-65% followed by calcimation at 10000 in a tunnel or in a chamber oven, increasing temperature consequently to 1430°.

*Materials. Concrete.

CARD:

1/2

COUNTRY

CATEGORY

: RZKhim., No. 23 1959, No. ABS. JOUR.

ROHTUA

INST.

TITLE

ORIG. PUB.

ABSTRACT Conid

: The possibility of utilizing indigenous clays was established together with the formulation of raw material blends and selection of operating conditions for the manufacture of ladles for optical Glass melting. -- L. Sedov.

CARD:

: HUNGARY

CATEGORY: Chemical Technology. Chemical Products and
Their Applications. Ceramics. Glass. Binding*
ABS. JOUR.: RZKhim., No. 23 1959, No. 83008

AUTHOR

: Knapn, C.

INST.

TITLE

: Modern Structural Glass

ORIG. PUB.: Technika (Magyar), 1959, 3, No 3, 5

ABSTRACT

: Brief description of various modern structural glass types employed for glassing in the windows ("thermex", "kontrasol", "thermoven"), as insulating and panneling material ("penosteklo"), for the construction of buildings ("profile" glass). Other expanding applications include the use of glass wool and glass plas-tics. -- S. Tipol't.

*Materials. Concrete.

CARD:

1/1

COUNTRY

: GDR

H

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Ceramics. Glass. Binding*

ABS. JOUR.

1959, No.83010 : RZKhim., No. 23

AUTHOR

: Hubscher, M.

INST.

TITLE

: Glass Containing Little Alkalies or No Alkalies and Boron Used for the Manufacture of Glass Wool and Other Objects.

ORIG. PUB.

: Silikattechnik, 1959, 10, No 2, 88-90

ABSTRACT

: A review of glass compositions containing either little alkalies or no alkalies and boron at all with the description of their properties as based on literature data and patents. The bibliography includes 6 refereces -- S. Iofe.

*Materials.

CARD:

: POLAND

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Ceramics. Glass. Binding* ABS. JOUR.: RZKhim., No. 23 1959, No. 83014

AUTHOR

: Swietlik, W.

INST.

TITLE

: Diagram of the Production Process of a Glass

Factory

ORIG. PUB.: Szklo i ceramika, 1959, 10, No 3, 63-68

ABSTRACT

: Presented is the detailed analysis of manufacturing process from the standnoint of a) organization, b) effects on working personnel and c) division of the manufacturing process into

its component parts. -- L. Sedov.

*Materials. Concrete.

CARD:

1/1

COUNTRY

: CHINA

CATAGORY

: Chemical Technology. Chemical Products and Their Applications. Ceramics. Glass. Binding*

ABS. JOUR.

1959, No. 83018 : RZKhim., No. 23

ROHTUA

: P'an Nan-ken

INST.

TITLE

: The Degree of Whitness of Titanium Enamels as

a Function of Its Obtainment Methods

ORIG. PUB.

: Hua hauch shuh chieh, 1959, 14, No 1, 16-17

ABSTRACT -

: In order to prevent the decrease in whitness of the titanium enamels it is recommended to lower iron content of the raw material to a minimum and to conduct calcination at 1250-

-1400° temperatures.

*Materials. Concrete.

CARD:

COUNTRY : CHINA

: Chemical Technology. Chemical Products and Their Applications. Ceramics. Glass. Binding*

ABS. JOUR.: RZKhimi, No. 28 1959, No. 83049

AUTHOR : -

CATEGORY

TITLE : Computation of Ingredients for the Production

of Cements Containing Lime.

ORIG. PUB. : Chien chu ts'ai liao kung yeh, 1958, No 21,

29-30

ABSTRACT : No abstract

*Materials. Concrete.

CARD:

1/1

COUNTRY : CHINA RATEGORY : Chemical Technology. Chemical Products and Their Applications. Ceramics. Glass. Binding*

ABS. JOUR. : RZKhim., No. 23 1959, No. 83050

AUTHOR : T'an Ch'ing-lin

INST.:
TITLE: Manufacture of Cement and Sulfuric Acid from
Gypsum

ORIG. PUB. : Hua haueh shih chieh, 1958, 13, No 12, 540-541

: In the burning of gypsum at temperatures exceeding 1000° a large quantity of SO₂ is generated. It can be employed for the manufacture of H₂SO₄. The residual CaO is reacted with clay, that is a portion of the mixture, forming cement. The best results were obtained with the following proportion of components present in a mixture (in %): clay-10,

gyosum-77, anthracite-13.

*Materials. Concrete.

CARD: 1/1

COUNTRY : CHINA

CATEGORY: Chemical Technology. Chemical Products and

Their Applications. Ceramics. Glass. Binding* ABS. JOUR.: RZKhim,, No. 23 1959, No. 83054

AUTHOR : Shen Chieh

INST. : TITLE : Characteristics of Hydrophobic Additives

Employed in the Manufacture of Cement in

China

1/1

ORIG. PUB.: Yeh chin chien scheh, 1959, No 3, 18-21

ABSTRACT : No abstract.

*Materials. Concrete.

CARD:

COUNTRY : CHINA

CATEGORY : Chemical Technology. Chemical Products and Their Applications. Ceramics. Glass. Binding*

ABS. JOUR. : RZKhim., No. 23 1959, No. 83056

AUTHOR : Shih Ying

INST. : Testing of the Acid Resistant Silicon Cement

Employed as a Solution for Lining

ORIG. PUB. : Hua hauch shih chich, 1958, 13, No 12, 549-550

ABSTRACT : No abstract.

*Materials. Concrete.

CARD: 1/1

H - 53

: CHINA

CATEGORY: Chemical Technology. Chemical Products and Their Applications. Ceramics. Glass. Binding* ABS. JOUR.: RZKhim., No. 23 1959, No. 83059

AUTHOR

: Ch'en Nien-i

INST.

TITLE

: Use of High Titanium Slags in the Manufacture

of Cement

ORIG. PUB.: Hua haueh shih chien, 1958, 13, No 5, 205-206

ABSTRACT : No abstract.

*Materials. Concrete.

CARD:

1/1

COUNTRY

: CHINA

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Ceramics. Glass. Binding*

ABS. JOUR.

1959, No. 83073 : RZKhim., No. 23

AUTHOR

:Wu Sheng-Kuang

INST.

TITLE

: Introduction of Lime and Water Into Concrete

Mixtures Lowers Consumption of Cement

ORIG. PUB.

: Shui li fa tien, 1958, No 18, 9-13

ABSTRACT

: No abstract.

*Materials. Concrete.

CARD:

: YUGOSLAVIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Ceramics. Glass. Binding* ABS. JOUR. : RZKhimi. No. 23 1959, No. 83088

AUTHOR

: Pajevic, M.

INSI.

TITLE

: Cellular Concrete - Modern Material of Con-

struction

ORIG. PUB.: Nase gradjev., 13, No 1, 5-11

ABSTRACT

: Review of qualities of the cellular concrete and the situation with regard to its manufacture in various countries of the world --

-- M. Stepanova.

*Materials. Concrete.

CARD:

-1/1

COUNTRY

: CZECHOSLOVAKIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Ceramics. Glass. Binding*; RZKhim., No. 23 1959, No. 83094

ABS. JOUR.

ROHTUA

: Kubala, M.

INST.

TIPLE

: Production of Slag Pumice In Foam Ducts of

the VUSH - 3 System

ORIG. PUB.

: Stavivo. 1959, 37, No 4, 114-116

ABSTRACT.

: No abstract.

*Materials. Concrete.

CARD:

COUNTRY CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Ceramics. Glass. Binding* RZKhim., No. 23 1959, No. 83096

ABS. JOUR. : RZKhim., No. 23

AUTHOR

: Ch'en Wen-i

INST.

TITLE

: Simplified Method of Laying Down High Melting

Point Asphalts

ORIG. PUB.: Hua hauch shih chieh, 1958, 13, No 12, 545-547

ABSTRACT

: Presented is the method of laying down asphalt at 250-280° temperature. Dependance between the softening point, heat transfer, laying down time and cooling time is reviewed.

*Materials. Concrete.

CARD:

1/1

COUNTRY CATEGORY : HUNGARY

: Chemical Technology. Chemical Products and Their Applications. Industrial Organic Synthe*

ABS. JOUR.

1959, No. 83112 : RZKhim., No. 23

AUTHOR

: Haidegger, E.; Szebenyi, I; Szekely, A.

INST. TITLE

: Solubility of Individual Components of Methane

Partial Oxidation in Dimethylformamide

ORIG. PUB.

: Magyar kem. folyoirat, 1958, 64, No 10, 365-

-371

ABSTRACT

: Absorbtion at equilibrium conditions of individual components of the product gas resulting from partial oxidetion of methane (C2H2, CO2, CH4, CO, H2, N2) in dimethylformamide(I) was studied at 5, 20, 40° and in the pressure range of 40 - 1000 mm Hg. Abs. Described is the processing scheme and procedure of the experiments. It was established that water content of I lowers considerably its

*sis.

CARD:

H

COUNTRY :

ABS. JOUR.: RZKhim., No. 23 1959, No. 83112

AUTHOR
INST.
TILE

ORIG. PUB. :

ABSTRACT

ter content is increased from 0.2 to 2.0% absorbtiom of C2H2 drops off(at 20° and 760 mm) by 6%, at a water content of 5% it drops off by 21%, at 6.8% by 31%. The authors consider that, with economics permitting, the water content of I (in the main scrubber) should not exceed 0.2 - 0.3%.-- S. Rosenfel'd.

CARD:

5/5

COUNTRY CATEGORY ; GDR

H

: Chemical Technology. Chemical Products and Their Applications. Industrial Organic Synthe*

ABS. JOUR. : RI

: RZKhim., No. 23 1959, No. 83115

AUTHOR

t Thurzo, G.

INST. TITLE Laboratory and Pilot Plant Production of Vinyl Monomers from Gases Containing Low Concentra-

tions of Acetylene.

ORIG. PUB.

: Chem. Technik, 1959, 11, No 2, 90-93

ABSTRACT -

A routine control and a semi-commercial method of derivation of vinyl chloride (I) was develoned employing netroleum refinery gases containing 7-8% C₂H₂ (II). I is senarated from the reaction mixture in such a way that its content in the residual mixture of CO and H₂ is suitable for subsequent syntheses. Experments were conducted employing gas, containing 8% II, 25% CO, 4% CO₂, 53% H₂, 1% air and 9% HCl. As catalyst (III) was employed (in wt %):

*sis.

CARD:

H COUNTRY CATEGORY ABS. JOUR.: RZKhim., No. 28 1959, No. 83115 AUTHOR INST. TITLE ORIG. PUB. : : 17.5 Hg Cl₂ + promoter, 17.5 BaCl₂ and 10 HgCl₃ + promoter 20 TiO₂ on the activated carbon (AC) ABSTRACT Con'd Clid was not introduced into the entering mixture as at temperatures < 2000 it does not affect the degree of II to I conversion. The highest conversion was attained with TiO2 as promoter: 100% at 120° and at a space velocity of 91 L/hr. and 98-99% conversion at 1500 and at a space of 182 [/hr. With further increase in space velocity the conversion drops off. At a 100% and 98% conversion (with the yield of I of 49.5 and 48 gr per 1kg III at 1200 and at 2/4 CARD: H COUNTRY CATEGORY : RZKhim., No. 23 1959, No. 83115 ABS. JOUR. AUTHOR INST. TITLE ORIG. PUB. :182 f/hr. space velocity) the life of III com-ABSTRACT

prizes respectively 120 and 300 hours. Upon further use of III the conversion and yield of I decrease. The senaration of I is nossible by means of condensation at low temperatures, by solvent absorption, and by adsrption on AC. The latter method was investigated employing mixtures, containing 8-10% I and AC as supersorbent. The highest degree of adsorption (prior to saturation) occured at 20° and comprized 240 gr I per 1 kg AC. Presented are

CARD:

H

 Π

ABS. JOUR.: RZKhim., No. 28 1959, No. 83115

AUTHOR : INST. : TITLE :

ORIG. PUB. :

ABSTRACT Con'd curves representing conversion of II as a function of gos velocity at 120, 150 and 180° and of catalyst life as well as curves showing yields of I obtained at the above temperatures, adsorption isotherms of I on AC at 20, 40 and 60° as a function of I conceptration. Presented also is process diagram of a semi-commercial installation. -- Ya. Kantor.

CARD:

4/4

COUNTRY CATLGORY : RUMANIA

: Chemical Technology. Chemical Products and Their Applications. Phmaceuticals. Vitamins.*

ABS. JOUR.

: RZKhim., No. 23 1959, No. 83242

AUTHOR

: Varcovici, H.

INST.

•

TITLE

: Aerosols Containing Medicinal Preparations

ORIG. PUB.

: Farmacia (Romin.), 1958, 6, No 4, 295-303

ABSTRACT -

Reviewed is the technique of introducing medicinal preparations (MP) in the form of aerosols, the proposed apparata for this purpose and properties of individual MP groups from the standpoint of a possibility of their application as aerosols (adrenalin, alkaloids, sulfamides, antibiotics and other groups). Presented is the formulation of individual aerosols, their composition, test methods and storage conditions. MP, employed in the form of aerosols, must satisfy the following

* Antibiotics.

CARD:

H

COUNTRY CATEGORY

ABS. JOUR.: RZXhim., No. 23 1959, No. 83242

AUTHOR INST. TITLE .

ORIG. PUB. :

ABSTRACT Con'd

: requirements: they must irritate mucus membranes of the respiratory organs, must desorb easily. For liquids the maximum allowable dosage must be contained in 1 ml of the preparations; if aerosol is used as a powder, dosage of the active substance (finely ground and non-hygroscopic) must be greater than 1-3 gr. The bibliography covers 13 references. -- G. Marcus.

CARD:

2/2

COUNTRY CATEGORY : BULGARIA

: Chemical Technology. Chemical Products and Their Applications. Pharmaceuticals. Vitamins?

1959, No. 83245 : RZKhim., No.23 ABS. JOUR.

AUTHOR .

: Levi. M.; Georgiev, A.

INST. TITLE

: Technological Derivation Method of Hydrazin

Sulfate from Urea

ORIG. PUB.

: Tr. N-i. in-t. farmatsiya, 1957, 1, 47-49

ABSTRACT

: The reaction of urea with sodium hypochlorite solution was studied as a function of temperature conditions and of concentration and presence of inhibitors. On the basis of the above study a technological method for derivation of hydrazin sulfate was developed resulting in the yield of 45%. This method is superior to that employed at the chemico-phamaceutical factory.

*Antibiotics.

CARD:

: BULGARIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Pharmaceuticals. Vitamins*

ABS. JOUR.: RZKhim., No. 23 1959, No. 83247

AUTHOR '

: Markov. S.

INST.

TITLE

: Derivation of Five Major Alkaloids From

"Papaver Somniferum" Popnies

ORIG. PUB.: Tr. N-i. in-t farmatsiya, 1957. 1. 93-95

ABSTRACT

: It is renorted of a new method for the derivation of morphine, codein, papaverin, tebain and narcotin from stalks or from "opium tar" of poppies. The following are characteristic features of this method: 1) the extraction work is conducted with safe and available solvents in simple apparata; 2) extraction processes are simplified and 3) the method is equally applicable to the senaration of panaverin, codein, tebain and narcotine as from the ion exchange effluent as well as from the opium tar extracts

*Antibiotics.

CARD:

1/1

COUNTRY

: CZECHOSLOVAKIA

CATLGORY

: Chemical Technology, Chemical Products and

Their Applications. Phamacouticals. Vitamins.*

1959, No. 83250 ABS. JOUR. : RZKhim., No. 23

AUTHOR

: Babulova, A.; Ditteova, V.; Selecky, P.

INST. TITLE

: Determination of Vitamin D Biological Activity

in Pharmaceutical Prenarations

ORIG. PUB.

: Farmacia (Ceskosl.), 1958, 27, No 7, 194-200

ABSTRACT.

: In the comparison of different determination methods of Vitamin D biological activity it was found that the most suitable method is one that determines ash content of the bones and the roentgenoscopic test applied to fat--free bones of the investigated animals.

-- I Matyeveva.

*Antibiotics.

CARD:

: CHINA

CATEGORY: Chemical Technology. Chemical Productss and
Their Applications. Pharmaceuticals. Vitamins.
ABS. JOUR.: RZKhimi, No. 23 1959, No. 88251

AUTHOR

: Hsin Ting- hsi

INST. TITLE

: Methods of Extraction of Berberin Chlorhydrate

from Oriental Arbor-Vitae

ORIG. PUB.: Chiang hai chun iyao, 1958, No 10, 35-38

ABSTRACT

: Experiments on the extraction of berberin chlorhydrate were conducted employing wateralcohol solution of varying concentration. It was established that the highest yield is obtained when extraction is performed with an acidified 60% alcohol. In the crystallization from 95% alcohol yellow needles of berberin chlorhydrate are obtained. -- Shen P'ei-ken.

*antibiotics.

CARD:

1/1

COUNTRY

: BULGARIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Pharmaceuticals. Vitamins*

ABS. JOUR.

: RZKhim., No. 23 1959, No. 83252

AUTHOR

: Ivanov, P.; Ivanova, L.

INST.

TITLE

: Study of Pimpinella Saxifraga L.

ORIG. PUB.

: Tr. N-i. in-t farmatsiya, 1957, 1, 80-81

ABSTRACT

: Bluesh-violet essential oil was found in the roots of the above mentioned plant. Quantity of this oil represented 0.70%. Ether number is 127.8 and specific gravity is 0.972. The oil possesses blood vessel dilating characteristics to a greater extent than does papaverin. kellin and "Ol. Anisi".

*Antibiotics.

CARD:

: BULGARIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Pharmaceuticals. Vitamins.

ABS. JOUR.: RZKhim., No. 23 1959, No. 88254

AUTHOR

: Popdimitrov. K .: Subeva. V.

THEF.

: Study of Derivation of Trypsin TITLE

ORIG. PUB.: Tr. N-i. in-t farmatsiya, 1957, 1, 144-146

ABSTRACT

: Autocatalysis of pancreas gland in the presence of 1% CaClo leads to the derivation of active amorphous trypsin (4.8-5.6 gr yield per lkg of vancreas gland). The product is usable for

medicinal purposes.

*Antibiotics.

CARD:

1/1

COUNTRY

: CZECHOSLOVAKIA

CATLGORY

: Chemical Technology. Chemical Products and Their Applications. Pharmaceuticals. Vitaminst

ABS. JOUR.

1959, No. 83263 : RZKhim., No. 23

AUTHOR

: Sarsunove, M.

INST. TITLE

: Determination of KNO3 in the Pure Form and in the Form of an Isotonic Additive in Eye Drops Containing Ag-Discetylalbuminate by Means of**

ORIG. PUB.

:Ceskosl. farmac., 1958, 7, No 8, 440-442

ABSTRACT.

: With the use of ion exchange chromatography, a simple and accurate micro-method was develoved for the determination of KNO3 in the pure form and as isotonic additive present in the "intargol" eye drops. The method consists in the binding of K+ and in the adsorption of Ag-diacetylalbuminate on a cation exchange substance, Extraction of HNO2 from KNO2 and

**Ion Exchange Chromatography.

*Antibiotics.

GARD:

COUNTRY CATEGORY H

ABS. JOUR. : RZKhim., No. 23 1959, No. 83263

AUTHOR

11113

ORIG. PUB. :

ABSTRACT

: in its determination by titration with 0.0lu. NaOH, while employing a mixed indicator. Advant tages of the method are: a small quantity of required substance, ease and accuracy of the Ag-diacetylalbuminate determination, that prevents possibility of an error in the determination of KNO3, that may be poluted with other potassium salts.

CARD:

2/2

COUNTRY CATEGORY : CZECHOSLOVAKIA

: Chemical Technology. Chemical Products and Their Applications. Pharmaceuticals. Vitamins*

: RZKhim., No. 23 1959, No. 83267 ABS. JOUR.

AUTHOR

: Blazek, J.

INST.

: Quantitutive Determination of Diethyl-n-Nitro-TITLE phenylphosphate (Soluble "Mintacol")

ORIG. PUB.

: Ceskosl. fermac., 1958, 7, No 8, 455-456

ABSTRACT

: A ranid determination method of the above substance was developed based on the reduction of the nitro-group into amine-group in soid medium by refluxing with Zn dust. (heating with the use of reflux condenser). The formed primary aromatic amino-group is titrated potentiometrically with 0.01 M. NaNO2 solution with the use of two electrodes (platinum and graphite), which are directly connected to a galvanometer. 1 ml of 0.01 M. NaNO2 solution

*Antibiotics.

CARD:

COUNTRY CATEGORY : H

ABS. JOUR.: RZKhim., No. 23 1959, No. 83267

AUTHOR

177.30% TITLE

ORIG. PUB. :

ABSTRACT Con'd

corresponds to 2.752 mg of diethyl-n-nitrophenylphosphate. Content of the latter in the preparation must be at a level of 1.66%. Error

of the method does not exceed 2%.

CARD:

2/2

COUNTRY

: BULGARIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Phermaceuticals. Vitamins*: RZKhim., No. 23 1959, No. 83268 ABS. JOUR.

AUTHOR

: Kolusheva, A.; Morozova, A.

INST.

TITLE

: Quantitative Determination of Camphor in the

Form of Oxycomphor

ORIG. PUB.

: Tr. N-i. in-t faratsiya, 1957, 1, 152-153

ABSTRACT .

: Refer to Ref. Zhur. - Khimiya, 1958, No 5,

14248

*Antibiotics.

CARD:

COUNTRY CATEGORY

: BULGARIA

: Chemical Technology. Chemical Products and Their Applications. Pharmaceuticals. Vitamins* RZKhim., No. 23 1959, No. 83270

ABS. JOUR. : RZKhim., No. 23

AUTHOR

: Kolusheva, A.; Nin'o, N.

TTSTE TITLE

: Analytical Control Method of the Technological

Production Process for Isonicotinic Acid

(HINA)

ORIG. PUB. : Tr. N-i. in-t farmaziya, 1957, 1, 160-163

ABSTRACT

: Developed is an analytical quantitative method for the determination of anti-tubercular prevaration - hydrazid of isonicotinic acid (I) as well as of intermediate products of its synthesis: 1) X-ethylpyridine by its oxidation with K2Cr2O7 un to iso-nicotinic acid (II) and titration of the excessive quantity of K2Cr2O7 with Mohr's salt or with a solution of I2; 2) II, by precipitation from a neutral medium with predetermined quantity of CuSO4 and

* Antibiotics.

CARD:

1/3

COUNTRY CATAGORY H

: RZKhim., No. 23 1959, No. 83270 ABS. JOUR.

AUTHOR INST.

TITLE

ORIG. PUB.

ABSTRACT Con'd

: iodometrical determination of the remaining quantity of the latter; 3) methyl and ethyl esters of II: a) by saponification with KOR alcoholic solution and b) refractometrically (esters are extracted from a neutral medium with CHC13 followed by the determination of the refractive index of the chloroform extract 4) quantitative determination methods of I: a) colorimetrically with the aid of 1-chloro--2, 4-dinitrobenzene and b) bromometrically

CARD:

H. COUNTRY CATEGORY

ABS. JOUR. : RZKhim., No. 23 1959, No. 88270

AUTHOR INST. TITLE

ORIG. PUB. :

ABSTRACT : and argentometrically (hydrolysis of I up to II and oxidation of the bydrazid residue to Con'd nitrogen).

3/3 CARD:

: BULGARIA COUNTRY

Chemical Technology. Chemical Products and Their Applications. Pharmaceuticals. Vitamins* RZKhim., No. 28, 1959, No. 83272 CATEGORY

ABS. JOUR.

: Kolusheva, A,; Nin'o, N. ROHTUA

INST. : Colorimetric Method for Quantitative Determi-TITLE

nation of "Cardiazol"

: Tr. N-i. in-t farmatsiya, 1957, 1, 150-151 ORIG. PUB.

: See Ref. Zhur.-Khimiya, 1958, No 14, 47810 ABSTRACT

*Antibiotics.

1/1 CARD:

: BULGARIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Pharmaceuticals. Vitamins* RZKhim., No. 23 1959, No. 83278

ABS. JOUR. : RZKhim., No. 23

AUTHOR

: Nin'o. N.

1137

TITLE

: Colorimetric Determination Method of Rohedrine

ORIG. PUB. : Tr. N-i. in-t farmatsiya, 1957, 1, 172

ABSTRACT

: Ephedrine (I) is determined quantitatively, utilizing its color reaction with freshly prenared Praude respent (0.1 gr ammonium molybdate in 10 ml concentrated H2SO4). The reaction proceeds when pure I is used with an accurately measured volume of the reagent while heating for 10 min. on a steam bath. The obtained stable green coloring, follows the Lambert's law in the range of 0.005-0.04 gr I in 5 ml of solution. By means of a Pulfrich refractometer equipped with S60 filter (No 3) the maximum of I absorption is established, this permitted

CARD:

1/2

*Antibiotics.

COUNTRY

CATEGORY

H

ABS. JOUR. : RZKhim., No. 23 1959. No. 83278

ROHTUA

INST.

TITLE

ORIG. PUB.

ABSTRACT -Con'd

: also to plot calibration curves and the curve for absorption of I. The method is applicable for the determination of I in the amount I-cardiazol solutions without preliminary separation of the latter. In the determination of I in other pharmaceutical mixtures it is necessary to extract I with ether.

A. Vavilova.

CARD:

: RUMANIA

H

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Pharmaceuticals. Vitamins*

ABS. JOUR.: RZKhimi, No. 23 1959, No. 83280

AUTHOR

: Bercevici,

INST.

: Fluorometric Determination of Bo Vitamin in TIPLE

Medicinal Preparations in the Presence of Other

Vitamins.

ORIG. PUB. : Rev. chim., 1958, 9, No 6, 335-337

ABSTRACT

: Developed is a method of quantitative determination of Bo vitamin (I) in vitamin prenarations, based on the ability of I to fluoresce in ultra-violet light when present in a neutral or in a weak acid medium with the intensity proportional to I concentration. Determinations are conducted in a Fulfrich's fluorophotometer. In the development of the fluorescence calibration curve a 0.02 gr sample of riboflavin, maintained at 105° for 2 hours, was dissolved while heating in 100 ml of 0.02 n. CH3COOH. To 10 ml of solution were added 3 ml

CARD:

1/3

*Antibiotics.

COUNTRY CATAGORY

ABS. JOUR.

: RZKhim., No. 23 1959, No. 83280

AUTHOR

IMST.

TITLE

ORIG. PUB.

ABSTRACT Con'd

of buffer solution (pH = 7), followed by dilution with distilled water up to 100 ml in volume. The obtained solution contained 20 K/ml of I. 1, 2, 3 and 4 ml were further diluted with distilled water to 5 ml volume followed by the determination of fluorescence intensity. For the determination of I in nolyvitamin pills, from 20 pills an average sample is selected, corresponding (in weight to a single pill. After crushing it, 10 ml of 0.02 n. CH3COOH is added together with 3 ml of a buffer solution and then diluted to 50ml

CARD:

COUNTRY CATEGORY

ABS. JOUR.: RZKhim., No. 23 1959, No. 83280

AUTHOR THAT! TITLE

ORIG. PUB. :

ABSTRACT Con'd

. with water, followed by shaking, filtration, 2-3 ml of filtrate are then diluted with distilled water to 5 ml volume and from the fluorescence intensity determine I employing the calibration curve. Relative accuracy of the method is 2.7%. -- G. Markus.

CARD:

3/3

COUNTRY CATEGORY : BULGARIA

: Chemical Technology. Chemical Products and Their Annlications. Pharmaceuticals. Vitaminst

: RZKhim., No. 23 ABS. JOUR.

1959, No. 83281

ROHTUA

: Ivanov. V. . Tomova, M.

INST. TITLE

: Phytochemical Study and Sevaration of a Hypotensive Substance from the Fruit and Roots of Siler Trilobum Crantz.

ORIG. FUB.

: Tr. N-i. in-t farmatsiya, 1957, 1, 55-58

ABSTRACT

: Phytochemical study of the Siler Trilobum Crantz was conducted. A number of components were discovered and isolated (yields in %): 1) from roots - essential oil - approx. 0.80, succrose - annrox. 9 and a new crystalline substance - silerin - 0.10 with the melting noint of 188-190 (probably a cumarine derivative of a C12H28O7 emperical formula). This substance proved to be physiologically active clearly revealing its hypotensive

*Antibiotics.

CARD:

COUNTRY CATEGORY H

ABS. JOUR. : RZKhim., No. 23

83281 1959, No.

AUTHOR

INST.

TIME

ORIG. PUB. :

ABSTRACT Con'd

: characteristic; 2) from fruits - essential oil with the yield of approx. 4%, the components of which are : citrous, perillic, and cuminic aldehydes. The essential oil processes a distinct physiological activity. Stelerin (yield of 0.06%) was also isolated from the fruits. 3) from the leaves and stock, cumerine derivatives were not isolated.

CARD:

2/2

COUNTRY

: YUGOSLAVIA

CATAGORY

Chemical Technology. Chemical Products and Their Applications. Pesticides. : RZKhim., No. 23 1959. No.

ABS. JOUR.

AUTHOR

: Novakovic, V.

INST. TITLE

: National Production and Imports of Chemicals

for the Protection of Plants in 1959

ORIG. PUB.

:Kemija u industriji, 1959, 8. No 2, 43-44

ABSTRACT

:No abstract.

CARD:

: YUGOSLÁVIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Pesticides. ABS. JOUR.: RZKhim., No. 23 1959, No. 83357

AUTHOR :

: Tominic, A.

INST.

TITLE

Toxicological Tests of "Paratione" and

"Diszinone" on Olive Flu

ORIG. PUB. : Zashtita bil'ya. 1957. No 43. 55-69

ABSTRACT

: Duration of the insecticidal action was tested on the olive fly (Dacus olese Gmel) of several insecticides containing esters of phosphoric ecid, "paratione" preparations: "emulsion E-605 forte" (I) and paratione. "Ekotox" suspension and a "diazine" preparation - "Basudine emulsiom (II) Fruits of the three varieties of cultivated olives and of the wild olive were immerced into solutions of the above preparations and, after a certain interval of time. were infected with the paracite. I in a concentration of 0.000092% and II in a

CARD:

1/2

COUNTRY CATEGORY \$ \$\$ 6 中国的人民国际公司的人的人的人的人们的人的现在分词,所谓这种的人的人**提**有行动

ABS. JOUR.

: RZKhim., No. 23 1959, No. 83357

可以的现在分词 医大大大小 有关的人类 医精神性病 经外债券的 海绵

AUTHOR

INST.

TITLE

ORIG. PUB.

ABSTRACT -Con'd

concentration of 0.00006- retain their activities even for 32 days after treatment. The duration of activity of preparations depends on the variety of olives which is the function of oil content in the fruits .-- K. Bokarev.

grand production and a second of the artists and a second

edus de la succesión de exercición de la final de la companya del companya de la companya de la companya del companya de la co 化二氯二甲基甲酚 医多种性 化二氯甲酚 医电子 医多种性 化二苯甲酚 网络牙髓网络 医皮肤 网络马克 医阿特勒氏管 医皮肤 医手术电脑 化

2/2

CARD:

: CZECHOSLOVAKIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Pesticides. RZKhim., No. 23 1959, No. 83373

ABS. JOUR. : RZKhim., No. 23

AUTHOR

: Kralova, E.; Fejlek, M.

IN 31 .

TITLE

: Control of Barn Pests - Borers in Food Products

ORIG. PUB.: Prumysl potravin, 1958, No 12, 654-656

: No abstract. ABSTRACT

CARD:

1/1

COUNTRY

: RUMANTA

CATEGORY

Chemical Technology. Chemical Products and Their Applications. Perfumes and Cosmetics.* RZKhim., No. 23 1959. No. 83431

ABS. JOUR.

AUTHOR

: Nazarie, A.

INST.

TITLE

: New Preparations for the Care of Hair

ORIG. PUB.

: Ind aliment. Prod. veget., 1959, No 1, 9-13

ABSTRACT

: Review of the properties of certain cosmetics employed for washing and dyeing of hair, dandruff-combatting preparations and substances that prevent the fell of hair. The bibliogra-

phy covers 26 references. -- A. Marin.

*Essential Oils.

CARD:

CZECHOSLOVAKIA

Ħ

CATEGORY

Chemical Technology. Chemical Products and

Their Applications. Chemical Processing of*

ABS. JOUR. : RZKhim., No. 23 1959, No. 83467

AUTHOR

: Grjaznov, N.

INST.

TITLE

: New Methods of Coal Pretreatment for Coking

ORIG. PUB. : Paliva, 1958, 38, No 7, 238-243

ABSTRACT

: Effect of fine grinding and of other coal (C) pretreatment methods on the quality of coke (K) has been investigated. A new principle for the pretreatment is indicated which consists in fine grinding:- the necessity of decreasing the unper limit of coal particles coarseness with the quantity of fine particles held to a minimum. The method of selective crushing (SC) is characterized in detail resulting in the 3-0 mm size and its

*Solid Fossil Fuels.

CARD:

1/2

COUNTRY CATEGORY

ABS. JOUR.

: RZKhim., No. 23 1959, No. 83467

ROHTUA

INST.

TITLE

ORIG. PUB.

ABSTRACT -Con'd

: effectiveness. Presented are flow diagrams for SC of raw charge (R) and its components. Depending on the composition of R and the required K quality, processing schemes include SC or fine grinding and SC with consequent treatment and compacting of .R. In certain instances it is permissible to add gas C into R in a 15-25% quantity and as 12-4 mm size particles. Described also is the preliminary preheat of R up to 100-2000, that leads to the increase of density and of structural strength of K and increases the coking rate. --Ya. Satunovskiy.

CARD:

CHINA

Chemical Technology. Chemical Products and

Their Applications. Chemical Processing of *

ABS. JOUR.: RZKhim., No. 23 1959, No. 83480

AUTHOR

; Wang Yin-jen; Liu P'in-shuang; Ch'en Wen-min

iner. TITLE

: Dependency of Tar Yield Obtained in Semi-Coking of Certain Chinese Coals on Their Chemi-

cal Composition

ORIG. PUB. : Jan liao hsue pao, Acta focalia simica, 1958,

3, No 1, 35-41

ABSTRACT

: Laboratory yields of tar derived from indigenous brown coals and hard coals were investigated. Applicability of recent empirical formules for the calculation of yields was checked. A simplified empirical formula was derived, demonstrating its applicability for the calculation of tar yields obtained in the semi--coking of Chinese coals. -- Z. Sablina.

*Solid Fossil Fuels.

CARD:

1/1

COUNTRY CATEGORY

: GDR

: Chemical Technology. Chemical Products and Their Applications, Chemical Processing of *

ABS. JOUR.

: RZKhim., No. 23

1959. No. 83481

AUTHOR

Leibnitz, E. Naumann, K., Hiller, C.

INST.

TITLE

: Identification of Brown Coal Tar Bases. IV. Chromatography of Bases on Paner.

ORIG. PUB.

: Chem. Technik, 1958, 10, No 2, 82-84

ABSTRACT

: Previously obtained fractions of the bases III - XXIV (Part III, Ref. Zhur.-Khimiya, 1958, No 9, 30106) were subjected to oxidation with \$e02 in the benzene solution and without solvent, as well as with H202 in the CH3COOH solution with subsequent separation of the exidation products with the aid of chromatography on paper. Solvent: butanol-formic acid (92%) - water (75: 15:10). The oxidation with SeO2 proceeds less intensively and

*Solid Fossil Fuels.

CARD:

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 83481

AUTHOR IFST.

TITLE

ORIG. PUB. :

ABSTRACT Con'd

: often only up to carbonic acids; chromatographic senaration of the product is less sharp. Presented is the list of identified bases. Butanol used in chromatography may be substituted with methylketone. -- S. Rosenfel'd.

CARD:

2/2

COUNTRY CATEGORY : YUGOSLAVIA

H

: Chemical Technology. Chemical Products and Their Applications. Chemical Processing of *: RZKhim., No. 23 1959, No. 83487

ABS. JOUR.

AUTHOR

INST.

: Todorovic, M.

TITLI

: Lignites as Raw Materials for Chemical Industry and for the Manufacture of City Gas.

Part II.

ORIG. PUB.

: Tehnika, 1958, 13, No 1, Hem. ind., 12, No 1,

6-12

ABSTRACT

: Discussed are various schemes of utilization of Yugoslavian lignites (L): gassification of common L at its mining location or after drying, at the grs consumption location; production of synthesis gas for the production of ammonia with the utilization of the methane fraction for the diversion into city gas. For Part I see Ref. Zhur.-Khimiya, 1959, No 5,

16769. -- G. Bonvech.

*Solid Fossil Fuels.

CARD:

COUNTRY · : POLAND CATEGORY : Chemical Technology. Chemical Products and Their Applications. Chemical Processing of* ABS. JOUR.: RZKhim., No. 23 1959, No. 83505 : Podkovinski, J.: Gliszczynski, J. AUTHOR INST. TITLE : Activated Carbon Obtained on Semi-Commercial Scale from Peat (PDR) and Comparison of its Quality with that of Indigenous and Foreign** ORIG. PUB. : Torf, 1958, 3, No 3, 15-19 ! Presented are commarative characteristics. ABSTRACT It is shown that activated carbon (grade "100") derived from neat is superior in quality to Polish "N" grade, Hungarian "Nuxit BO" and Soviet "AP-3" grade, and is equal in quality to the German "Supersorbon" type. Based on its high sorntion characteristics, with regard to benzene and provane, it may find application in the chemical and petroleum industries. *Solid Fossil Fuels. **Activated Carbons. CARD: 1/2 COUNTRY CATEGORY 1959, No. 83505 ABS. JOUR. : RZKhim., No. 23 AUTHOR IMST. TITLE ORIG. PUB. A conclusion is being made reparding the nece-ABSTRACT ssity of producing a large quantity of such Con'd a carbon for the ournose of verifying its applicability on a commercial scale.

CARD: 2/2

: CHINA

: Chemical Technology. Chemical Products and Their Applications. Chemical Processing of *

ABS. JOUR.: RZKhimi, No. 23 1959, No.

AUTHOR

: Pien Mu-tun

INST.

TITLE

: Microanalytical Determination Method of Nitro-

gen Content in Coal

ORIG. PUB. : Hua hauch shih chieh, 1958, 13, No 1, 36-37

ABSTRACT

: A new method for the determination of No in coal is recommended. It is a modification of the Kjeldahl's method differing from the latter in that the analytical sample of solid fuel is oxidized with boiling H₂SO₄ in the presence of a catalyst-selenic acid and anhydrous Na₂SO₄. Through the addition of excess caustic, gaseous NH2 is generated which is absorbed in boric acid solution. Quantity of NH3 is then determined by titration with methyl orange as an

*Solid Fossil Fuels.

CARD:

1/2

COUNTRY

H

CATEGORY

ABS. JOUR.

1959, No. 83512 : RZKhim., No. 23

AUTHOR

INST.

TITLE

ORIG. PUB.

ABSTRACT Con'd

indicator. Time required to perform a single determination by this method is 3-4 times longger than when employing the common method.

-- A. Zonntag.

CARD:

CATEGORY

: Chemical Technology, Chemical Products and Their Applications. Chemical Processing of *

ABS. JOUR.: RZKhim., No. 23 1959, No. 83515

AUTHOR

: Georgiyev, Ts.

INST.

TITLE

: Hypersorption Method for the Separation of

Natural and Artificial Gases

ORIG. PUB.: Tezhka promishlenost, 1958, 7, No 7, 29-33

ABSTRACT

:Presented is description of the method and of hasic equipment involved as well as domains of its industrial application. The bibliogra-

phy includes 29 references.

*Solid Fossil Fuels.

CARD:

1/1

COUNTRY

: POLAND

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Chemical Processing of *

ABS. JOUR.

: RZKhim., No. 23 1959, No. 83530

AUTHOR

:Pikulski . J.

INST.

TITLE

:Tubestill Distillation at one of the Baku

Refineries

ORIG. PUB.

:Wiadom. naft., 1958, 4, No 4, 88-89

ABSTRACT

:No abstract.

CARD:

*Natural Gases and Petroleum. Motor and Rocket Fuels. Lubricants.

1/1

H - 79

: GDR COUNTRY : Chemical Technology. Chemical Products and CATEGORY Their Applications. Chemical Processing of * ABS. JOUR. : RZKhimi, No. 23 1959, No. 83539 AUTHOR INST. : Plant for the Generation of Gas from Petroleum TITLE in England ORIG. PUB.: Energietechnik, 1958, 8, No 9, 416-422 : In connection with the planned expansion in ABSTRACT the GDR of city gas manufacture from petroleum in particular that imported from the USSR, described is an operating plant in England, that employs the Segas process and produces 210,000 m3/day of gas of 4580 kcal/Nm3 heating value. The plant has 2 trains of gas generators, liquid petroleum fractions comprize raw feed. For every 1000 kcal in the gas the *Natural Gases and Petroleum. Motor and Rocket Fuels. Lubricants. CARD: 1/2COUNTRY CATEGORY : RZKhim., No. 23 1959, No. 83539 ABS, JOUR. AUTHOR INST. TITLE

ORIG. PUB.

ABSTRACT Con'd

:following consumption of petroleum fractions is reported (1): for gas generation - 0.149, for steam generation - 0.017; steam consumption - 0.209 kg; air consumption - 0.763 m3; water consumption - 182 m3/hour. -- N. Gavrilov.

H

CARD:

CZECHOSLOVAKIA

CATEGORY

Chemical Technology. Chemical Products and

Their Applications. Chemical Processing of *

ABS. JOUR.: RZKhim., No. 23 1959, No. 83550

AUTHOR

: Stand, M.

1337.

TITLE

: Use of Czechoslovakian Adsorbents for Hypersorptional Separation of Hydrocarbon Gases

ORIG. PUB.: Chem. prumysl, 1958, 8, No 12, 617-622

ABSTRACT

: Presented are the results of test on the ettrition, adsorption capacity, selectivity and desorption characteristics of five grades of indigenous edsorhents (two grades of activated carbon - Supersorbon and Bensarbon, clay silicagel, and "Aluzil adsorbent clay). Shown are advantageous characteristics of both activated carbon grades and particularly of the Bensorbon.

*Natural Gases and Petroleum, Motor and Rocket Fuels. Lubricants.

CARD:

1/1

COUNTRY CATEGORY BULGARIA

:Chemical Technology. Chemical Products and Their Applications. Chemical Processing of*

ABS. JOUR.

: RZKhim., No.23

1959. No. 83584

AUTHOR INST. TITLE

: Gerasimov, M.; Ruschev, D.; Radoykov, A.

: Synthesis of Antioxidant Oil Additives in Bulgaria Derived from Indigenous Raw Materials

ORIG. PUB.

:Tezhka promishlenost, 1958, 7, No 9, 37-40

ABSTRACT -

: Experimental investigations of the selection of raw materials for the synthesis of anioxident additives for lubricating oils, that could be manufactured from Tyulanovskaya crude oil in large quantities. For this nurpose, the 175-200° and 200-230° fractions of gas generator tar, wood tar (beech), Dmitrovskiy, Pirinskiy and other semicoking tars. and also of Plachkovskiy coal tar were investigated. Presented are data that characterize

Natural Gases and Petroleum. Motor and Rocket Fuels. Lubricants.

CARD:

H

COUNTRY CATEGORY

ABS. JOUR. : RZKhim, No. 23 1959, No. 83584

AUTHOR THET. TIPLE

ORIG. PUB. :

ABSTRACT Con'd

: physico-chemical properties of the indicated tars and quality of the transformer oils, TM-14, containing additives such as n-oxydiphenylamine, 3-phenoxyphosphine and 43 complex additives synthesized, with each being added in a quantity equivalent to 0.25%. It is demonstrated that a number of obtained additives are more effective than individual organic compounds. -- Ya. Satunovskiy.

CARD:

2/2

COUNTRY UATEGORY : RUMANIA

: Chemical Technology. Chemical Products and Their Applications. Chemical Processing of*

ABS. JOUR.

1959, No. 83596 : RZKhim., No. 23

ROHTUR

: Auslander, G.

THEF. : Liquid Density at the Boiling Point and the TITLE Characterization Factor

: Petrol. si gaze, 1958, 9, No 5, 227-229

ABSTRACT

ORIG. PUB.

: The dependence between liquid density at boiling point (dg) and "characterization factor" (Ko) is presented. Formula for calculation Ko is given. The established dependence is found useful in the determination of the presence and quantity of paraffine wax in petroleum fractions. -- I. Rozhkov

*Natural Gases and Petroleum. Motor and Rocket Fuels. Lubricants.

CARD:

: BULGARIA

H

CATEGORY

: Chemical Technology. Chemical Product and their Applications. Chemical Wood Products*

ABS. JOUR. : RZKhim., No. 23 1959, No. 83687

AUTHOR

: Dimov, K.; Lukanov, T.; Zhulev, S.

IN K.

: Khim - technol. Institute

TITLE

: Experiments in the Obtainment of Furfural from

Sunflower Seed Hulls

ORIG. PUB.: Godishnik Khim.-tekhnol. in-t, 1957(1958), 4

No 1, 43-53

ABSTRACT

: Experiments were conducted with the purpose of establishing optimum conditions for the pre--hydrolysis step and subsequent obtainment of the maximum yield of furfural (I) with the condition that the derived cellulose (C) will be suitable for chemical treatment. It was demonstrated that with the increase of hydro--modulus by a factor of 2 (from 3 to 6) the yield of I increases rapidly while the ash and

*Hydrolysis Industry.

CARD:

1/3

COUNTRY

YRODEPAU

23 1959, No. ABS. JOUR. : RZKhim., No. 83687

AUTHOR INST. TITLE

ORIG. PUB.

ABSTRACT -Con'd

: pentozane content in the solid residue decreases respectively by 27 and 75%. This is accompanied by an intensive destruction of C (the degree of polymerization (DP) is 543 at a hydro-modulus of 1: 3 and 389 at 1: 6). Green ter portion of pentozenes (80.5%) and of ash (45.5%) is being removed at the lowest hydro--modulus. In so doing a substancial destruction of C occurs while the yield of I from pentozanes remains unsatisfactorily low (approx. 32%). The most suitable hydro-modulus

CARD:

COUNTRY :

H

ABS. JOUR.: RZKhim., No. 23 1959, No. 83687

AUTHOR : INST. : TITLE :

ORIG. PUB. :

ABSTRACT Con'd : level is 4.5 - 5.0 at which the yield of I is 36.9% and the obtained C is suitable for chemical refining (CR=417). The yield of I increases when I is removed from the reaction mixture at a high rate.

CARD:

3/3

COUNTRY

: POLAND

H

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Chemical Wood Products *

ABS. JOUR. : RZKhim., No. 23 1959, No. 83689

AUTHOR

: Buguslawska, K.

INST.

: --

TITLE

: Neutralization of Sulfite Lixivium

ORIG. PUB.

: Przegl. papiern., 1959, 15, No 4, 122-123

ABSTRACT

:It is recommended to neutralize sulfite lixiviums with calcite when the former is used for the manufacture of alcohol. At an active acidity of luxiviums, in order to raise pH from 2.5 to 5.0, 10 kg of calcite, containing 92.2% CaCO3, is required ver lm³ of luxivium. The question of removal and of further utilization of the sediment has not been solved yet This sediment is obtained in the neutralization in the quantity of 30 kg on wet basis (or 4 kg - dry basis).— Ye. Gurvich.

*Hydrolysis Industry.

CARD:

: RUMANIA

: Chemical Technology. Chemical Products and Their Applications. Fats and Oils. Waxes. * RZKhim., No. 23 1959, No. 83704

ABS. JOUR. : RZKhim., No.

AUTHOR :

: Ruckenstein. C.

INST.

TITLE

: Reduction of Losses in the Refining of Vegeta-

ble Oils.

ORIG. PUB. : Rev. ind. aliment. prod. vegetale, 1958. No 2.

9 - 10

ABSTRACT

: The necessity of attaining the following noints is indicated: 1) precise measurment of vessel volumes for the refined oil (RO) and accurate accounting of the incomong as well as RO while nerforming ≥ 1 times every 24 hours of the following tests on RO: the determination of the ether insoluble substances content, water comtent, volatile substances (at 105°), gel-like substances and phosphatides; 2) thorough senaration of RO from the impurities and its

*Soans and Detergents. Plotation Agents.

CARD:

1/2

COUNTRY

H

CATEGORY

ABS. JOUR.

: RZKhim., No. 23 1959, No. 83704

AUTHOR

INST.

TITLE

ORIG. PUB.

ABSTRACT. Con'd

:treatment with an electrolyte: 3) use of ontimum process conditions; 4) particular attention to be devoted to the overation of the vacuum unit and the use of steam in the deodorization with the subsequent reduction of time in it; 5) to employ condensate in the washing of RO (95-97°); 6) compulsory employment of filtration for the pressed oil and an attempt to find ways of employing filtration for oil obtained by extraction: 7) proper maintenance of the equipment avoiding losses in all the manufacturing operations. -- A. Marin

CARD:

: POLAND

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Fats and Oils. Waxes.*

: Effect of Paper Wrapping on the Stability Fats

ABS. JOUR.: RZKhim., No. 23 1959, No. 83713

AUTHOR

: Kwapniewski, Z.; Rutkowski, A.; Kubik, B.

THET. TITLE

ORIG. PUB. : Przem. spozywczy, 1958, 12, No 10-12, 412-415

ABSTRACT

: Conducted were experiments pertaining to the investigation of the effect of wrapper porosity and of the presence of iron and copper in the wrapping material on the degree of self-oxidation of fatty products and of the effect of employing wrapping paper, saturated with antioxidant (A) solution. Five types of wrapping paper were investigated: parchment, semi-parchment, acidic parchment, white and brown cardboard. Paper or/and cardboard was finelly

*Soaps and Detergents. Flotation Agents.

CARD:

1/4

COUNTRY

H

CATEGORY

ABS. JOUR.

: RZKhim., No. 23 1959, No. 83713

AUTHOR

INST.

TITLE

ORIG. PUB.

ABSTRACT Con'd

: bulverizwd into mill, employing emery wheel. followed by mixing with molten fat (F) in the proportion of 5 gr of mill ner 95 gr F. The mixture was left standing in a beaker within a thermostatically controlled oven at 60° temperature. Simultaneously, a sample of F containing no paper mill was subjected to the same conditions. Periodically, the peroxide number was determined on both samples. As a measure of stability, a certain interval of time was considered during which the peroxide number of a sample reached certain

CARD:

Ħ COUNTRY CATEGORY ABS. JOUR.: RZKhim., No. 23 1959, No. 83713 AUTHOR ' INST. TITLE ORIG. PUB. : ABSTRACT predetermined value. It was established that Con'd the fastest rate of oxidation occurs with samples of F containing parchment and acidic parchment maner. Effect of different grades of naper on the increase of free fatty acids content was not noticed. For the nurnose of revealing the effect of paper structural charateristics on the stability of F, 1 gr F, dissolved in 5 ml of petroleum ether, was placed on a piece of paper measuring 11×7.5 cm. After the evanoration of netroleum ether, naper samples (suspended on nylon threads) were exposed to CARD: 3.4 H COUNTRY CATEGORY : RZKhim., No. 23 1959, No. 83713 ABS. JOUR. ROHTUA INST. TITLE ORIG. PUB. diffused day light at 130 = 180 temperature. The ABSTRACT. fastest rate of self-oxidation was noted with Con'd F applied to white and gray cardboard, wherein the rate of F oxidation on cardboard at 13-180 was greater than that of F admixed with ground paper that was stored at 60°. This fact points to a larger negative effect resulting from the porosity of wranning. Experiment involving the application of F on maner samples, impregnated with A solution (0.01% by weight of paper) revealed the distinct effect of A on the retardation of the F oxidation process. -- M.Zemlyanykhina CARD:

: GDR COUNTRY

: Chemical Technology. Chemical Products and Their Applications. Fats and Oils. Waxes. Soaps

ABS. JOUR. : RZKhim., No. 23 1959, No.

: Moch, R. AUTHOR

INST.

CATEGORY

TITLE : Chemical Cleaning Process

ORIG. PUB. : Faserforsch. und Textiltechn., 1959, 10, No 3,

129-137

: Result of an investigation of the surface-ac-ABSTRACT

tive and physical properties (surface tension, density, viscosity) of waterless detergent solutions, employed in chemical cleaning. The study included effect of small quantities of water added to waterless detergent solutions. Structures of the micells in aqueous and in waterless solutions, mechanism of the conju-

gated dissolution of hydrophylic and

*and Detergents. Flotation Agents.

CARD:

1/2

COUNTRY CATEGORY

1959, No. 83731 ABS. JOUR. : RZKhim., No. 23

AUTHOR INST. TITLE

ORIG. PUB.

ABSTRACT Con'd

:hydrophobic substances, occuring with the aid of micell interaction are revealed. The article discusses employment of substances, orompting the conjugated dissolution as substances termed the intensifiers of chemical cleaning. -- A. Zinov'yev.

H

CARD:

COUNTRY : POLAND : Chemical Technology. Chemical Products and CATEGORY Their Applications. Carbohydrates and Their* RZKhimi, No. 23 1959, No. 83739 ABS. JOUR. : RZKhimi, No. 23 : Srzednicki, Z. AUTHOR IN ST. : Institutes of Beet Culture and Sugar Manufature TITLE in the GDR ORIG. PUB. : Gaz. cukrown., 1959, 61, No 1, 31-32 : The Educational Technological Institute of ABSTRACT sugar industry affiliated with the Gumboldt University trains personnel for sugar refineries. The institute operates with full cooneration of sugar refineries. In recent years a number of research projects have been completed (investigations covered organic acids, contained in the diffused and nurified juices, physical and chemical properties of sugar solutions encountered in the manufacture of *Processing. 1/3 CARD: COUNTRY CATEGORY 83739 1959. No. : RZKhim., No. 23 ABS. JOUR. AUTHOR INST. TITLE ORIG. PUB. : sugar, and others). Institute of Beet Culture ABSTRACT has also been founded in the GDR. It has 5 divisions: seed-growing laboratory, seed-gro-Con'd wing in the field, biochemical, fitopathalogical, and genetic divisions. The research work comprizes studies of mono-steam and polyploidel beet seeds, studies of specific qua-

H

2/3 CARD:

lity seeds of various grades. The third institute in GDR - The Central Institute of Biclogy - has the following sections: botanical, plant hygiene, prognostics, zoological and

H

ABS. JOUR.: RZKhimi, No. 23 1959, No. 83739

AUTHOR

INST.

TITLE

ORIG. PUB. :

ABSTRACT Con'd

: virus. The most interesting works of this institute pertain to problems involving the

handling of beet pests.

CARD:

3/3

COUNTRY

HUNGARY

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Carbohydrates and Their* : RZKhim., No. 23 1959, No. 83740

ABS. JOUR.

AUTHOR

: Hangyal, K.

INST.

TITLE

: History of the Ercsi Sugar Refinery

ORIG. PUB.

: Cukorivar, 1959, 12, No 2, 33-38

ABSTRACT

: No abstract.

* Processing.

CARD:

COUNTRY : RUMANIA

Chemical Technology. Chemical Products and CATEGORY

Their Applications. Carbohydrates and Their*

1959, No. 83741 ABS. JOUR. : RZKhimi, No. 23

: Ehrenkranz, D. AUTHOR

INST.

: The Role of Colloids in the Sugar Industry TITLE

ORIG. PUB.: Rev. ind, aliment. plod. vegetale, 1958, No 12

13-17

: A review article. Reviewed are major colloids ABSTRACT

encountered in the manufacture of sugar (cellulose, hemicellulose, pectin substances, araban, proteins, peptons and others), quantities of colloids contained in beets and in the intermediate products of the manufacture, their effect on the manufacturing process and basic way of preventing their appearance and eliminating their action in the manufacturing pro-

cessing steps .-- D. Bronsheyn

*Processing.

CARD:

1/1

: HUNGARY COUNTRY

: Chemical Technology. Chemical Products and CATEGORY

Their Applications. Carbohydrates and Their*

1959, No. 83743 : RZKhim., No. 23 ABS. JOUR.

: Oplatka, G. AUTHOR

INST.

: A New Continuous Diffuser "J" TITLE

: Cukorinari kutatoint. kozl., 1956, 3, No 1, 44 ORIG. PUB.

-52

: See Ref. Zhur.-Khimiya, 1957, No 18, 62256 ABSTRACT -

and also 1959, No 4, 13397.

*Processing.

1/1 CARD:

: CZECHOSLOVAKIA COUNTRY : Chemical Technology. Chemical Products and CATEGORY Their Applications. Carbohydrates and Their* ABS. JOUR.: RZKhim., No. 23 1959, No. 88745 : Burianek, J. Slechtova, D. AUTHOR INST. Purification of Sugar Solutions by Electrodia-TITLE lysis with the Aid of Ionite Membranes. I-II. ORIG. PUB. : Listy cukrovarn., 1959, 75, No 3, 62-66; 66-69 ABSTRACT : I. Described are: priciples of electrodialysis of the electrolytes with the use of ionite membranes, possibilities of employing this method for the purification of sugar juices, theoretical bases of purification of juices by this method and advantages in comparison with the common method employed in juice purification with ionites. In the electrodialysis of juices with ionite membranes the following are eliminated: the inversion of sucrose, *Processing. 1/4 CARD: COUNTRY CATEGORY : RZKhim., No. 23 1959, No. ABS. JOUR. 83745 AUTHOR INST. TITLE ORIG. PUB. : employment of chemical reagents for the ionite ABSTRACT regeneration, dilution of juices. Experimental Con'd investigations covered values of electric current used in the purification with ionite membranes of the saturated juice, green syrun and molasses of 15° Br. density as a function of the electrodialysis duration. The value of electrical charge, required for the transfer from the liquid space of the electrodializator into two neighboring spaces has

 \mathbf{H}

2/4 CARD:

been established for these products for the

COUNTRY H CATEGORY ABS. JOUR.: RZKhim., No. 23 1959, No. 83745 AUTHOR INST. TITLE ORIG. PUB. : ABSTRACT : purpose of ascerting a complete removal of electrolytes from the juice. The determination Con'd of electrical charge value is essential for calculation of the electric power consumption required for purification of juices and of electrodializator's efficiency. II. Conducted were laboratory experiments on the electrodialysis with the use of ionite membranes employing mixtures of green syrup and saturated juice having densities of 30, 35, 40, 45, 50, 60 and 70° Br. It was established from the standpoint of electric power consumption 3/4 CARD: COUNTRY H CATEGORY : RZKhim., No. 23 1959, No. 83745 ABS. JOUR. AUTHOR INST. TITLE ORIG. PUB. :and of ionite membrane surface area require-ABSTRACT . ments, it is the most realistic way if green Con'd syrup in a mixture with saturated juice is subjected to electrodialysis. Presented is the determination method of the optimum concentra-tion of such a mixture. Purified mixture may be refined separately or it may be returned to the evangrators. Electrodialysis of the green syrun, aside of its purification effect, leads to the reduction of quantity of the obtained latter products at a refinery. -- Ye. Shnayder

4/4

CARD:

CZECHOSLOVAKIA

CATEGORY

Chemical Technology. Chemical Products and

Their Applications. Carbohydrates and Their* RZKhim., No. 23 1959, No. 83748

ABS. JOUR. :

RZKhim., No. 23

AUTHOR

: Vasatko, J; Gartner, M.; Kleinertova, A.

INSI. TITLE

: Production Method of Lectic Acid from Calcium

Saccharite Obtained from Desugaring of the

Feed Molasses

ORIG. PUB.

: Prumysl potravin, 1959, 10. No 1, 47-52

ABSTRACT

: See Ref. Zhur.-Khimiya, 1958, No 4, 12767

*Processing.

CARD:

1/1

COUNTRY

: CZECHOSLOVAKIA

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Carbohydrates and Their*

ABS. JOUR.

: RZKhim., No. 23 1959, No. 83749

ROHTUA

: Mlchova, J.: Svedova, J.

INST.

TITLE

: Use of Polyamide Fabrics as Filter Cloth in

the Sugar Manufacture

ORIG. PUB.

:Listy cukrovarn., 1959, 75, No 2, Inform. sluz

sluzba, 1-3

ABSTRACT

: Polyamide fibers were employed at 83 sugar refineries in 1957-1958. At three refineries, a polyester fabric made of "terilene", an imported febric from England, was tested as filter cloth. In comparison with polyamide fabric the latter one possessed greater resistance to temperature and to chemicals and swelled to a lesser extent. - Ye. Shnayder.

*Processing.

CARD:

: CZECHOSLOVAKIA

H

CATEGORY: Chemical Technology, Chemical Products and Their Applications. Carbohydrates and Their* ABS. JOUR.: RZKhim., No. 23 1959, No. 83751

AUTHOR

: Sepitka, A.

TNEW.

TIPLE

: Nomogram for Simplified Determination of Molas-

ses Quality Based on P. M. Silin's Method.

ORIG. PUB. : Listy cukrovarn., 1959, 75- No 3, 59-61

ABSTRACT

: Based on the method developed by P.M. Silin pertaining to the determination of normal quality (Q) of molasses and based on formulas by him (see Ref. Zhur.-Khimiya, 1954, No 7, 22844; 1956, no 21, 70197) a nomogram was developed, that permits determining the following factors: a) quantity of water, necessary to add or remove from molasses in order to bring it up to a required exhaustion density level, b) Q of liquid after the exhaustion, c) Q of normal

Processing.

CARD:

1/2

COUNTRY CATEGORY

ABS. JOUR.

1959, No. : RZKhim., No. 23

AUTHOR

INST.

TITLE

ORIG. PUB.

ABSTRACT . Con'd

:molasses. The nomogram is corrected for the exhaustion of molasses at a density, that is determined directly by a refractometer (82° Br.), as well as when molasses is diluted 1: 1 (83.5° Br.). Accuracy of the nomogram is not inferior to that of the method.

-- Ye. Shnayder.

CARD:

: CHINA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Carbohydrates and Their*

ABS. JOUR.: RZKhim., No. 23 1959, No. 83754

AUTHOR

INST.

TITLE

: Sugar Production Method from Sugar Cane by

Extraction

ORIG. PUB.: Shih p'in kung yeh, 1959, No 1, 15-18

ABSTRACT

: Presented is the description and diagram of the original equipment employed at a local plant, as well as description of the sugar extraction process from sugar cane employed in the Tung-hsiang district (of the Chiang hsi province, CDR), notorious for its 500 year's sugar manufacturing experience. -- A. Zonntag.

*Processing.

CARD:

1/1

COUNTRY

: CHINA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Carbohydrates and Their *

ABS. JOUR.

: RZKhim., No. 23 1959, No. 83760

AUTHOR

INST.

TITLE

: Experience in the Quality Improvement of

Potato Starch

ORIG. PUB.

:Shih n'in kung yeh, 1959, No 1, 27-29

ABSTRACT

:Description of the process equipment employed at the Chinese starch refinery "K'e" in Hei ling chang province, with the aid of which quality of the produced starch is improved: color - white with crystalline luster, moisture - 19.8%, ash content - 0.27%, acid number -4. black snots - 2 per 1 cm2. -- A. Zonntag.

*Processing.

CARD:

: CHINA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Carbohydrates and Their* RZKhimi, No. 23 1959, No. 83764

ABS. JOUR. : RZKhimi, No. 28

AUTHOR

IMST.

TITLE

: Quality Improvement of Corn Starch

ORIG. PUB.: Shih p'in kung yeh, 1959, No 1, 29

ABSTRACT

. Announcement regarding the measures undertaken at the Chinese starch factory in the K'e ling province resulting in the improvements of raw

starch purification.

*Processing.

CARD:

1/1

GOUNTRY

: POLAND

H

CATEGORY

: Chemical Technology. Chemical Products and Their Annlications. Carbohydrates and Their*

ABS. JOUR.

1959, No. 83768 : RZKhim., No. 23

AUTHOR

:Gruzczynski, K.

INST. TITLE

:Production of Sodium Alginate from Seaweeds

Growing in Poland

ORIG. PUB.

:Przegl. wlokienn., 1958, 12, No 11, Biul.Inst. wlokienn., 10, No 8, 18

ABSTRACT -

:Described are methods of obtainment of two sodium alginate (I) varieties, one of low viscosity (30-100 cm.), another of high viscosity (300-700 co.), that find application in the textile industry. The derivation of high viscosity I encounters difficulties due to a too rapid depolymerization rate of alginic acid and due to its sensitivity to temperature variations. Subsequent manufacturing stens of I include: grinding of dried seeweeds, sifting

*Processing.

CARD:

COUNTRY: H
CATEGORY:

ABS. JOUR.: RZKhim., No. 23 1959, No. 83768

AUTHOR
INST.
TIPLE

ORIG. PUB. :

ABSTRACT

and classifying, washing with dilute hydrochloric acid or with double-distilled water, double extraction of the ground and washed seaweeds with 5% NaCO3 solution, purification of the I solution by centrifuging, bleaching with chlorine and separation of I with ethyl alcohol, drying and grinding of I product. Apparata employed in the manufacture of I should not be made of iron. It is made of acid-resistant metals, glass, wood. -- D. Bronshteyn

CARD: 2/2

COUNTRY : CATEGORY :

ABS. JOUR. : RZKhim., No. 1959, No.

AUTHOR : INST. : TITLE :

orig. PUB. :

ABSTRACT

CARD:

: POLAND

: Chemical Technology. Chemical Products and Their Applications. Fermentation Industry.

ABS. JOUR. : RZKhim., No. 23

1959, No. 83778

H

H

AUTHOR

: Sandera, K .: Drachowska, M.

INST. TITLE

: Application of Membrane Conductometry in the

Technology.

ORIG. PUB.: Przem. spozywczy, 1958, 12, No 10-12, 395-398

ABSTRACT

: Investigations of conductivity were found Applicable to characteristics of membranes made of high molecular weight substances in the studies of newest packing materials for the control of changes occuring within and in the establishment of dependency on their chemical composition, preparation methods, and storage conditions. Bioconductometrical measurments are applicable to the investigation of measurments themselves, occuring in inorganic solutions, aging of the gels and colloid

CARD:

1/2

COUNTRY

CATEGORY

ABS. JOUR.

No. 83778 1959, : RZKhim., No.23

ROHTUA

INST.

TITLE

ORIG. PUB.

ABSTRACT Con'd

: crystallization. They are also applicable in the control of processes involving fermentation of sugars and changes, occuring in raw

materials and foodstuffs.

CARD:

: CHINA

H

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Fermentation Industry

ABS. JOUR.: RZKhim., No. 23 1959, No. 83779

AUTHOR

: Yu Hsing-yuan

INST.

Ø 4172

TITLE

: Manufacture of Alcohol from "Dioscorea Nispida"

Dennst

ORIG. PUB. : K'e hsuch ta chung, 1959, No 2, 81-82

ABSTRACT : No abstract.

CARD:

1/1

COUNTRY

: YUGOSLAVIA

H

CATEGORY

: Chemical Technology. Chemical Products and Their Annlications. Permentation Industry

ABS. JOUR.

: RZKhim., No. 23 1959, No. 83780

AUTHOR

: Johanides, V.; Alacevic-Grlic, M.

INST. TITLE

Derivation of Heterozygotic Species from Different Asperpillus Niger Calcites for the Purpose of Increasing Amylolytic Activity of*

ORIG. PUB.

: Kemija u industriji, 1959, 8, No 4, 91-94

ABSTRACT.

Amylolytical ferments that are produced by the "Aspergillus niger" (A.n.) species when placed within a culture, from the standpoint of economics, possess advantages in the conversion of starches to sugars employed in the alcohol manufacture in comparison with rye or grain malt. Of the 25 investigated species (for their amylolytical activity), three samples of A.n. were selected as the most active ones. These species were cultivated in

*Fungi.

CARD:

H

COUNTRY CATEGORY

ABS. JOUR. : RZKhim., No. 23 1959, No. 83780

AUTHOR INST. TITLE

ORIG. PUB. :

ABSTRACT Con'd

: pairs for the purpose of obtaining heterozygotic cultures. As the result of anastomosis of species A.n. No 337 NRRL and No 439 a new sample of species was obtained, which in a submerged culture, formed greater quantity of amylolytic ferments, than the natent components.

CARD:

2/2

COUNTRY CATEGORY : BULGARIA

: Chemical Technology. Chemical Products and Their Applications. Fermentation Industry

ABS. JOUR.

No. 1959, : RZKhim., No. 23

AUTHOR INST.

: Rankov, G.; Popov, A.; Yovchev, A.

: Khim. Inst. Bulg. Acad of Science : A Method of Removing Methyl Alcohol from Vod-

TITLE kas (Rakija) on a Commercial Scale

: Izv. Khim. in-t Bulg. Acad. of Science ORIG. PUB.

ABSTRACT

: A method was developed in accordance with which a still is charged with 2000-3000 & of vodka (rakija) followed by heating with steam up to boiling point for a period of time (approx. 8 hours), during which the rectifying column, which operates with infinite reflux ratio, is enriched with 93-95% ethyl alcohol while all of methyl alcohol (I) is transferred into the column. I tends to concentrate in the first half of distillate, the total quantity of which reaches 5% hasis

CARD:

H

ABS. JOUR.: RZKhim., No. 23 1959, No. 83783

AUTHOR

INST. TITLE

orig. PUB. :

ABSTRACT Con'd

: total quantity of vodka charged into the still. The second half of distillate contains I in a quantity lower then that present in the raw vodka charge, and as the result of this, this latter distillate may be added to the next batch of vodka to be freed of I. The first half of distillate, enriched with I and comprizing 2.5 Vol. % of batch charge, subjected to the elimination of I, may be utilized as technical denaturated alcohol, else by means of fractionation from this fraction may be derived methyl alcohol, higher alcohol (solvent) and ethyl alcohol(containing amprox. 1% of I).

CARD:

2/2

COUNTRY CATLGORY : POLAND

: Chemical Technology. Chemical Products and Their Applications. Fermentation Industry

ABS. JOUR.

: RZKhim., No. 23 1959, No. 83785

AUTHOR INST.

: Ilezuk, Z.

TITLE

: Infection of the Acetone-Butyl Musts with Extraneous Microorganisms

ORIG. PUB.

: Acte microbiol. polon., 1958, 7, No 2, 149-158

ABSTRACT -

: Qualitative and quantitative investigation of the infection encountered in the acetonobutyl fermentation was conducted, revealing its effect on the yield of acetone (I). From 17 samples of musts the following 18 bacteria species were identified: Lactobacillus, Streptococcus, Bacillus, Bacterium, Sarcina, Micrococcus, Pseudobacterium, and 3 species of yeast. The senarated species had different effect on the formation of I. Lactobacillus inhibited the process strongly, for instance

CARD:

H

CATEGORY

ABS. JOUR. : RZKhim., No. 23 1959. No. 83785

AUTHOR INST. TITLE

ORIG. PUB. :

ABSTRACT Con'd

: L. mannitopoeus lowers the I yield by 87% as commared to the control sample. The effect of non-acid-forming bacteria on the yield of I was minimal. Yeasts added in a quantity of approx. 670,000 cells per 1 ml lowered the yield of I to some degree.

CARD:

2/2

COUNTRY CATEGORY : CZECHOSLOVAKIA

: Chemical Technology. Chemical Products and Their Applications. Fermentation Industry

: RZKhim., No. 23 1959, No. 83787 ABS. JOUR.

AUTHOR

: Gregr, V.; Dyr, J.

INST. TITLE

: Improvements of the Technological Process of

Lactic Acid Manufacture from Molasses

ORIG. PUB.

ABSTRACT

:Sb. Vysoke skoly chem.-technol. Praze. Odd. Fak. potravin. Technol., 1957, [1], 177-195 · Based on special studies on the improvement of mother culture preparation methods involving lactic bacteria and on the establishment of ontimum conditions of their nutrition, an accelerated method of conducting process on a commercial scale has been developed. It in sures increase in the productivity of the fermentation department by 100% at the simultaneous economy of malt sprouts, malt, autolysate, phosphates and sulfuric acid and improvement in quality of the lactic acid.

CARD:

: RUMANIA

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Fermentation Industry ABS. JOUR.: RZKhim., No. 23 1959, No. 83791

AUTHOR

: Mateescu. C.

INST.

TITLE

: Inovations and Rationalizations at the "Rakhova

Brewery, RDR

ORIG. PUB. : Ind. aliment. Prod. veget., 1959, 11. No 2,

62-63

ABSTRACT : No abstract.

CARD:

1/1

COUNTRY

: CZECHOSLOVAKIA

H

CATAGORY

: Chemical Technology. Chemical Products and Their Applications. Fermentation Industry

ABS. JOUR.

: RZKhim., No. 23 1959, No. 83793

ROHTUA

: Kahler, M.

INST.

TITLE

: Hygienical Conditions in Bottling Departments and Their Effect on the Stability of Beer.

ORIG. PUB.

: Prumysl potravin, 1959, 10, No 1, Pril .:

Desinf. notravin. prumyslu, 38

ABSTRACT -

: Discussed are advantages and disadvantages of individual equipment items and processes from the standpoint of hygiene.

CARD:

: CZECHOSLOVAKIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Fermentation Industry

1959, No. 83795 ABS. JOUR. : RZKhim., No. 23

AUTHOR

: Klazar, G.; Bednar, J.

INST.

TITLE

: Bottling Beer Hot

ORIG. PUB. : Kvasny prumysl, 1959, 5, No 1, 3-6

ABSTRACT

: Filtered beer is sterilized in a leaf heater and without cooling is bottled employing a special valve and thoroughly washed (the presence of a smallest speck of dirt causes foaming) and heated, up to 40°, bottle of high strength (at a temperature of beer-650, the bottle must be checked to withstand 6.1 atm. pressure, at 80° - 7.6 atm). As heer enters the bottle it flows along the bottle's internal walls and fills it up to a mark without foaming. A small air space increases stability

CARD:

1/2

COUNTRY

H

CATEGORY

ABS. JOUR.

: RZKhim., No. 23 1959, No.

AUTHOR

INST.

TITLE

ORIG. PUB.

ABSTRACT

of beer. When employing the above method of bottling the productivity is increased by 25 - 40%; organoleptical properties are not changed (neither due to hot bottling nor due to rapid or slow subsequent cooling). Extraneous odors, taste and easily precipitated sediment, characteristic to any nasteurized beer, are absent. The foam stability of beer is improved, while color is somewhat darker than normal. As annlied to heers with annropriate coll. stability, this method insures technological advantages and is economically effective .-- R.Zalmanzon.

CARD:

: YUGOSLAVIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Fermentation Industry

1959, No. 83797 ABS. JOUR. : RZKhim., No. 23

AUTHOR

: Zanko, V.

INST. TITLE

: Developments in the Wine-Making

ORIG. PUB. : Agrom.glasnik, 1959, 9, No 1, 15-22

: No abstract. ABSTRACT

CARD:

1/1

COUNTRY

: BULGARIA

CATEGORY

: Chemical Technology. Chemical Products and Their Amplications. Fermentation Industry: RZKhim., No. 23 1959, No. 83809

ABS. JOUR.

AUTHOR

: Lichev, V.; Panayotov, I.

INST. TITLE : Chem. Inst. of Bulg. Academy of Science : Aliphatic Aldehydes of Cognac Alcohol

ORIG. PUB.

:Izv. Khim. in-t. Bulg. Acad. of Science, 1958, 6, 121-129

ABSTRACT

: Aliohatic aldehydes contained in cognac alcohols derived from "Dimyat" 1953 cron were senarated by fractional distillation from aromatic aldehydes. In each of the 9 obtained fractions were found, with the aid of selective chromatography on maner and in the form of 2, 4-dinitronhenylhydrazones the following HCOH, CH3COH, propyon-, butyr-; valeraldehydes and others. Of the aromatic aldehydes were identified syringin aldehyde, vanillin, coniferyl and n-oxybenzaldehyde.

CARD:

: BULGARIA

Chemical Technology. Chemical Products and Their Applications. Fermentation Industry

ABS. JOUR.: RZKhim., No. 23 1959, No. 83810

AUTHOR

: Lichev, V.; Panayotov, I.

INST.

: Chem. Inst. of Bulg. Academy of Science

TIPLE

: Presence of Reducing Sugars in Cognac Alcohol

and in Plum Brandy (Rakija)

ORIG. PUB. : Izv. Khim. in-t. Bulg. Acad. of Science, 1958,

6, 167-179

ABSTRACT

: In cognac alcohol, aged for 1-5 years and in Bulgarian plum brandy are found reducing sugars, that are normally found in the initial stages of aging, whose composition depends on the type of barrel wood. The presence of rhamnose, xylose, erabinose and glucose was found in cognac alcohols and that of xylose and glucose in the plum brandies. In the alcohol extract derived from acacia wood the presence of xylose only was established chromatographically

CARD:

1/1

COUNTRY

: BULGARIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Food Industry.

ABS. JOUR.

: RZKhim., No. 23 1959, No. 83825

AUTHOR

: Vasilev, D.

INST.

TITLE

: Storage and Refining of Food Products

ORIG. PUB.

: Tekhnika (Bulg.), 1959, 8, No 2, 34-35

ABSTRACT

: No abstract.

CARD:

: BULGARIA

CATEGORY

: Chemichal Technology. Chemical Froducts and

Their Applications. Food Industry.

ABS. JOUR. : RZKhim., No. 23 1959, No. 83828

AUTHOR

: Doney, I.

INST.

TITLE

: Anolication of Ultrasound in the Food Industry

ORIG. PUB. : Khranit. prom-st, 1959, 8, 37-38

ABSTRACT : A review.

CARD:

1/1

COUNTRY

: HUNGARY

CATLGORY

: Chemical Technology. Chemical Products and

Their Applications. Food Industry

ABS. JOUR.

: RZKhim., No. 23 1959, No.

ROHTUA

: Timko, I.

INST.

TITLE

: Progress and Modern Problems of the Food

Products' Hygiene

ORIG. PUB. : Elelm: iper, 1959, 13, No 4, 111-113

ABSTRACT : No abstract.

CARD:

: CZECHOSLOVAKIA

CATEGORY

: Chemical Technology. Chemical Product and Their Applications. Food Industry

ABS. JOUR.: RZKhim., No. 23 1959, No. 83832

AUTHOR

; Soukup, J.

INST.

TITLE

: Inorganic Desinfectants

ORIG. PUB. : Frumysl notravin. 1959, 10, No 1. Pril. :

Desinf. potravin. prulyslu, 11-12

ABSTRACT

: A review of annlication methods of various inorganic substances used for desinfecting of the equipment, quarters, apparel and painted

walls.

CARD:

1/1

COUNTRI

: CZECHOSLOVAKIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Food Industry

ABS. JOUR.

: RZKhim., No. 23 1959, No. 83833

AUTHOR

:Krampla, F.

INST.

TITLE

:Organic Desinfectants for the Food Industry

ORIG. PUB.

:Prumysl notravin, 1959, 10, No 1, pril.:

Desinf. notravin. prumyslu, 10-11

ABSTRACT

: The characteristic of organic desinfectants

employed in the food industry

CARD:

COUNTRY CATEGORY : HUNGARY

: Chemical Technology. Chemical Products and Their Applications. Food Industry

ABS. JOUR.: RZKhim., No. 23 1959, No. 83834

AUTHOR

: Szabo, Z.

INST.

TITLE

: Employment of Filtration in the Food Industry

ORIG. PUB. : Elem. ibar, 1959, 13, No 5, 162-164

ABSTRACT

; Principles involved in the selection of filtration equipment and characteristics of batch

type filters.

CARD:

1/1

COUNTRY

: PULAND

H

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Food Industry

ABS. JOUR.

: RZKhim., No. 23 1959, No. 83836

AUTHOR

: Koczyk, I.

INST.

TITLE

: Vitamins in Grain and in the Products Derived

From It

ORIG. PUB.

:Przegl. zvoz. - mlynarski, 1959, 3, No 1, 23-

ABSTRACT

: Presented is a brief characteristic of A vitamins of the groups B. K. E. folic and aminobenzoic acids, information pertaining to the total vitamin content of grain (as a function of its quality and the degree of rineness). flour and in grain products. -- Z. Fabinskiy

CARD:

COUNTRY CATEGORY : BULGARIA

: Chemical Technology. Chemical Products and

Their Applications. Food Industry

ABS. JOUR. : RZKhim.. No. 23

1959, No. 83840

AUTHOR

. Lambadzhiyev, A.

INST. TITLE

: Higher Institute of Food Industry, Ploydiv. : Suitability of Hard Bulgarian Wheat for the

Composition Improvement of Grinding Grain

Mixtures

ORIG. PUB. : Nauchni tr. Vissh. in-t khranit. i vkus. prom-

-st- Plovdiv, 1958, 4, 73-95

ABSTRACT

: Based on the studies of baking qualities of various grades of hard and soft wheat as well as their mixtures, quality improvement of the weak wheat grain (for example, "Okerman", No 159 and others) was deemed feasible and attainable through the addition of hard wheat

grain into the mixtures.

CARD:

1/1

COUNTRY

: POLAND

: Chemical Technology. Chemical Products and Their Applications. Food Industry CATAGORY

ABS. JOUR.

1959, No. 88842 : RZKhim., No. 23

AUTHOR

: Szmidt, W.

INST. TITLE

: Effect of Wheat Flour Made of Sprouted Grain

on the Quality of Bread

ORIG. PUB.

: Przegl. zboz.-mlynarski, 1958, 2, No 12, 343-

ABSTRACT

: In the employment of wheat flour, made of sprouted grain, and used in a mixture with rye flour, it is necessary to determine the dextrine number, on the basis of which an ontimum quantitative ratio of wheat and rye

flour in a mixture may be established. -- Z. Fabinskiy

CARD:

COUNTRY : POLAND

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications.

AUTHOR

ABS. JOUR. : RZKhim., No. 23

: Rernhercs, A.

INST.

TITLE

: Machinery and Flour-Grinding Equipment Abroad

1959. No. 83843

ORIG. PUB.: Pezegl. zboz.-mlynarski, 1958, 2, No, 12, 347-

-348

ABSTRACT

: Presented is a brief characteristic of machi-

nery employed for husking and polishing of

grain and also of senarators and nortable pneu-

matic loaders. -- Z. Fabinskiy

CARD:

1/1

COUNTRY

: YUGOSLAVIA

CATEGORY

:Chemical Technology. Chemical Products and

ABS. JOUR.

Their Applications. Food Industry: RZKhim., No. 23 1959, No. 83845

AUTHOR

: Pantelic. G.

INST.

TITLE

: Microorganisms in the Baking Industry and

Biochemistry of Fermentation

ORIG. PUB. : Proizv. i prerada brasna, 1959, 8, No 4, 71-78

ABSTRACT -

:No abstract

CARD:

: POLAND

H

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Food Industry

ABS. JOUR: : AZKhim., No. 23 1959, No. 83848

AUTHOR

: Szmidt, W.

INST.

TITLE

: Particle Size of Flour and Its Effect on the

Quality of Dough

ORIG. FUB. : Przegl. zboz.-mlynarski, 1959, 3, No 1, 29

ABSTRACT

: Proved is the necessity of analying different methods of dough preparation depending on the

particle size of flour .-- Z. Fabinskiy

CARD:

1/1

COUNTRY

: YUGOSLAVIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Food Industry

ABS. JOUR.

: RZKhim., No. 23 1959, No. 83850

AUTHOR

: Struyich, D.

INST.

TITLE

: Air Conditioning in the Bread-Baking Industry.

I, II.

ORIG. PUB.

: Tehnika, 1959, 14, No 4. Prehran. ind., 13.

No 4. 49-52

ABSTRACT

:No abstract

CARD:

: RUMANIA

H

CATEGORY

: Chemical Technology. Chemical Products and

ABS. JOUR.: RZKhim., No. 28 1959, No. 83859

AUTHOR

: Petrescu, I

INST.

TITLE

: Developments in the Production of Green Peas

Preserves

ORIG. PUB.: Ind. aliment. Prod. veget., 1959, 11, No 2, 57

-58

ABSTRACT : No abstract.

CARD:

1/1

COUNTRY CATEGORY : BULGARIA

: Chemical Technology. Chemical Products and

Their Applications. Food Industry

ABS. JOUR.

: RZKhim., No. 23 1959, No. **83867**

AUTHOR

: Radoyv. A.; Mladenov, A.

INST.

TITLE

: Dietetic Pumpkin Flour. Part I.

ORIG. PUB.

: Nauchni tr. Vissh. in-t khranit. i vkus.

prom-st-Plovdiv, 1958, 4, 203-206

ABSTRACT.

: Based on the presented data pertaining to chemical composition of pumpkin flour (containing carotin, mineral salts, vitamin C, pectin substances), derived from a large variety numokin (cucurbita maxima), experiments of feeding infants, have been started. This also included feeding of children and adults having liver and kidney ailments. The method of preparation: after washing a numnkin is neeled and cleaned of the pulny part diced and dried followed by grinding in a hammer mill.

CARD:

: YUGOSLAVIA

H

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Food Industry.

ABS. JOUR. : AZKhim., No. 29 1959, No. 83871

AUTHOR

: Stambolic. M.

INST.

TITLE

: Production of milk in Yugoslavia

ORIG. PUB.: Mljekarstvo, 1959, 9, No 6, 121-124

ABSTRACT

: No abstract

CARD:

1/1

COUNTRY

: YUGOSLAVIA

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Food Industry

ABS. JOUR.

: RZKhim., No. 23 1959, No. 83872

AUTHOR

: Dahlstedt, A.

INST.

TITLE

: General Review of Recent Development in

Equipment Employed by the Milk Industry.

ORIG. PUB.

: Mljekarstvo, 1959, 9, No 5, 101-106

ABSTRACT

: No abstract

CARD:

: CZECHOŚLOVAKIA

H

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Food Industry

ABS. JOUR. : RZKhim., No. 23 1959, No. 83894

AUTHOR

: Sulc. J.

INST.

....

TITLE

: Trends in the Production of Yogurt and of

Buttermilk Beverages

ORIG. PUB.: Prumysl notravin, 1958, 9, No 5, 245-250

ABSTRACT

of the new production methods of buttermilk beverages. Scandinavian method is considered as most economical one. Pasteurized milk is curdled and then cooled in tanks, homogenized and bottled. The recommended scheme for the production of yogurt is: pasteurized milk enters the vacuum apparatus without cooling for the removal of a portion of its water, then it enters a tank where it is cooled and curdled. A misture of milk and curds is then bottled in stoppered bottles. The latter, after being

CARD:

1/2

COUNTRY

H

CATEGORY :

ABS. JOUR. :

: RZKhim., No. 23 1959, No. 83894

AUTHOR

INST.

TITLE

ORIG. PUB.

ABSTRACT - Con'd

theated, is then dosaged (approx. 30 gr), introducing the bottom of bottles, (after the latter were washed). Then the bottles enter a conveyer, where they are cooled with the stream of air. Bottles, containing curdled milk, are placed in baskets and kent under controlled temperature conditions for the final curdling. After this the flow of warm air is discontinued and yogurt is cooled by snraying bottles with cold water. Completion of the curdling process is determined with the aid of a remote notentiometer. -- G. Titov

CARD:

COUNTRY CATEGORY AUTHOR INST. TITLE

: POLAND

: Chemical Technology. Chemical Products and Their Applications. Food Industry

ABS. JOUR. : RZKhim., No. 28 1959, No.

: Hattowska, H.: Kalinowski. L.

: Evaluation of Butter Production from the Standpoint of Microbiological Investigations,

Conducted at the Institute of Milk Industry

ORIG. PUB.: Przegl. mlecczarski, 1957, 5, No 12, 20-22

ABSTRACT

: Becteriological quality of Polish butter is considered lower than of that produced in the USSR. GDR or England. The overall bacterial content of highest quality Polish butter reaches 22 mln/ml, wherein approx.60% of microflora consist of non-milk curdling varieties and in the 54% of samples the presence of intestinal bacteria was revealed. The reason for low quality butter is the low quality raw materials, the composition of curdling and mainly unsatisfactory sanitary-hygienic conditions

1/2 CARD:

COUNTRY CATEGORY

H

1959, No. : RZKhim., No.23 ABS. JOUR. 83907

AUTHOR INST. TITLE

ORIG. PUB.

ABSTRACT Con'd

: in the handling and refining of milk. To this can be added the insufficiently effective washing of the plant equipment and of milk lines.

- V. Novikova

CARD:

: POLAND

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Food Industry.

ABS. JOUR.: RZKhim., No. 23 1959, No. 83908

AUTHOR

: Cesul, J.

INST.

TITLE

: Quality of Butter in the Light of Scientific

Investigations of Recent Years

ORIG. PUB.: Przegl. mleczarski, 1957, 5, No 12, 18-20

ABSTRACT

: Presented are data on the investigation of macro-and microstructure of butter: conditions and distribution of fet and water, of flora, affecting the consistency of butter and its stability. Reviewed is the feasibility of butter treatment in an atmosphere of CO2 or

under pressure. -- V. Novikove.

CARD:

1/1

COUNTRY

: CZECHOSLOVAKIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications: Food Industry

ABS. JOUR.

1959, No. 83910 : RZKhim., No. 23

AUTHOR

: Havlicek. Z.

IMST.

TITLE

: Transportation of Milk in Tank and Manufacture

of Cheese

orig. PUB.

:Prumysl notravin, 195 , 9, No 5, 244-245

ABSTRACT -

: From milk, delivered in tanks, 67% of elementary first grade cheese were produced in May, 69% in June, 67% in July, 70% in August and 72% in Sentember. The balancing nortion of cheese was graded as second class, and no third grade cheese was produced at all. Based on the conducted experiments a possibility of manufacture elementary cheese from milk, delivered in tanks was established under condition of rapid delivery of high quality milk.

-- G. Titov.

CARD:

: YUGOSLAVIA

H

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications, Food Industry. 1959, No. 88921

ABS. JOUR. : RZKhim., No. 29

AUTHOR

: Vujicic, I.

INST.

TITLE

: Cheese Mite in Cheese and Casein

ORIG. PUB. : Mljekarstvo, 1958, 8, No 2, 36-38

ABSTRACT

: To combat cheese mites, in addition to the mechanical cleaning of cheese, it is washed with concentrated NaCl solution, with a mixture of alcohol and CS2 (20:1) or with a 0.07% solution of dicloroethyl or dichloromethyl ether. Cheese mite may be destroyed by the imersion of cheese into water for several seconds at 65° temperature. For the prevention of infection of cheese with mite it is recommended that cheese be stored at a temperature < 10° and at a relative humidity of < 80%. -- Z. Lebedevs.

CARD:

1/1

COUNTRY

: CZECHOSLOVAKIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Food Industry

ABS. JOUR.

No. 83924 1959, : RZKhim., No. 23

AUTHOR

: Cerovsky, J.; Henik, J.; Hojdar, J.; Knez, V.

INST. TITLE

: Mechanized Flow Line for the Production of

Acid Casein

ORIG. PUB.

: Prumysl potravin, 1958, 9, No 6, 285-288

ABSTRACT -

: For complete mechanization of a continuous flow in the manufacture of casein it is proposed to include a counterflow, direct action washer and a transporter press. The washer comprizes a slanted, stationary cylinder, equipped with an internal, perforated, rotating drum, having a mixer. Paddles of the mixer are arranged in a screw type fashion along the whole length of the shaft. They are so oriented as to direct the flow of grains unward, countercurrently to the flow of water.

CARD:

COUNTRY CATEGORY Н

ABS. JOUR.: RZKhimi, No. 23 1959, No. 83924

AUTHOR INST. TITLE

ORIG. PUB. :

ABSTRACT Con'd

: Experiments have shown that the use of a washer doubles capacity of the fermentation vats. increases the mannower productivity by 20%, decreases the manufacturing price of casein by 41.5%. The consumption of water employed in washing casein particles, derived from 5000 L of milk, comprises 7200 Q instead of 12,400 Q used in 4 applications of batch washing if done in accordance with the usual method. -- G.Titov

CARD:

2/2

COUNTRY

: CZECHOSLOVAKIA

: Chemical Technology. Chemical Products and CATEGORY

Their Applications. Food Industry

ABS. JOUR.

1959, No. 83930 : RZKhim., No.23

ROHTUA

: Rusz. J.

INST. TITLE

: Effect of Feed Used During the Pattening Period on the Chemical Composition of Goose

ORIG. PUB.

: Prumysl potravin, 1958, 9, No 11, 574-578

ABSTRACT

: It has been established that the fat of geese, fed with corn, contains less saturated acids (6-7% linoleicacid), then when fed eith oats (un to 15%). Thus, geese, fattened un with oats, are less stable under frozen storage condition. The bibliography covers 21 titles.

-- D. Yakesh.

CARD:

: RUMANIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Food Industry

ABS. JOUR. : RZKhimi, Ro. 23 1959, No. 83939

AUTHOR

: Heitel, F.

INST. TITLE

: Is it Possible To Reduce Analysis Time for the

Determination of Fats in Meat Products?

ORIG. PUB. : Rev. ind aliment. prod. animale, 1957, No 8-9,

27 - 28

ABSTRACT

Reduction of the number of syphoning operations by 2, 3 and 4 times with the use of correction coefficients of respectively 0.60, 0.40 and 0.20%, as well as extraction with only one syphoning, but with electrical heating (24 Volts) for 5 minutes of the middle portion of the Soxhlet apparatus, permitted the reduction of time for the determination of fat in meat products by 50%. The results obtained in the extraction with benzene and ether, were close. -- A. Marin

CARD:

1/1

COUNTRY

: HUNGARY

CATEGORY

: Chemical Technology. Chemical Products and

Their applications. Food Industry RZKhim., No. 23 1959, No. 8394

ABS. JOUR.

: RZKhim., No. 23 No.83941

AUTHOR

:Lorincz. F.; Kneffel, P.

INST.

: Stability of the "Salmonella" Type Bacteria TITLE

With Respect to Heating and to Sodium Chloride

ORIG. PUB.

: Elelm. ipar, 1957, 11, No 11-12, 225-231

ABSTRACT -

: Presented are results of the experiments on the study of the effect of cooking methods, boiling and salting, employed in the Hungarian meat industry on the activity of salmonella tyne bacteria. It is established that in the boiled sausage products, with the improved techniques in boiling, followed by frying, the salmonellas are practically absent. Salting and marinading of products infected with salmonella, guarantees their non-toxicity under the conditions of prolonged curing. It is

CARD:

COUNTRY CATEGORY

H

ABS. JOUR. : RZKhim., No. 23

1959, No. 83941

AUTHOR

INST.

TIPLE

ORIG. PUB. :

ABSTRACT Con'à

: established that the stability of salmonella to heating and to sodium chloride is vastly

different. -- S. Rosenfel'd.

CARD:

2/2

COUNTRY

: CZECHOSLOVAKIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Food Industry

ABS. JOUR.

1959, No.83942 : RZKhim., No. 23

AUTHOR

:Janicek, J.; Boublik, M.; Kovarik, M.

INST.

TITLE

: Drying of Meat by Sublimation (Lyophilization)

ORIG. PUB.

:Prumysl notravin, 1959, 10, No 2, 72-76

ABSTRACT

: Studied were the basic conditions of meat drying by sublimation. Water content in the dehydrated beef is 5.5-8.3%, in pork 4.6-8.1%; pH respectively 5.1-5.6 and 5.2-5.8. Freshness of the dehydrated beef was determined by the NH3 content; after the restoration of moisture NH3 content in beef comprized 15.7 mg%, in nork 16.9 mg%. Storage of the dehydrated meat at temperatures of -20, 4, 20 and 370 for 70 days did not affect the NH3 build up in meats $(16.5 \text{ mg% at } -20^{\circ}, \text{ and } 18.20 \text{ mg% at } 37^{\circ}).$ -- D. Yakesh.

CARD:

: POLAND

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Food Industry

ABS. JOUR.: RZKhim., No. 23 1959, No. 83947

AUTHOR

: Koepne, S.; Sroczynski, T.

INST.

TITLE

: Chloride Content in the Muscles of Ham With

the Arterial Injection of Brine

ORIG. PUB. : Przem. spozywczy, 1957. 11. No 11. 478-478

ABSTRACT

: In the salting of hems, employing injection of an 8% brine into the arteries, the NsCl content in individual muscles comprizes 0.5 - 4.5%. In the shortly trimmed hams, the average NaCl content is lower. As a result of this it is recommended that 0.5 - 1.0% more brine be injected in the latter type hams. For the obtainment of uniform salted products, hams must be kent in the curing brine for some time.

CARD:

1/1

COUNTRY

: CZECHOSLOVAKIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Food Industry: RZKhim., No. 23 1959, No. 83954

ABS. JOUR.

AUTHOR

:Lat. J.

INST. TITLE

:Certain Problems of the Manufacturing Techno-

logy of Hard Smoked Sausages

ORIG. PUB.

:Prumysl potravin, 1959, 10, No 2, 69-72

ABSTRACT .

Review of the basic manufacturing aspects of high quality hard smoked sausages. -- D. Yakesh

CARD:

: CZECHOSLOVAKIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Annlications, Food Industry

ABS. JOUR. : RZKhim., No. 23 1959, No. 83955

AUTHOR :

: Stefunks, F.

INST.

TITLE

: Casings for Smoked Cheese Sausages and for

Certain Other Varieties of Smoked Meat.

ORIG. PUB.: Prumysl notravin, 1958, 9, No 11, 566-569

ABSTRACT

: Presented are the results of experiments in the production of casings for hard smoked sausages. Presented are recepes for various casings/coverings. The following composition is recommended: 1\$. chlorine water, 80g gelatine, 250g chalk, 20g tragacanth, 25g glycerine and 50g talcum. -- D. Yakesh.

CARD:

1/1

COUNTRY

: YUGOSLAVIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Food Industry

ABS. JOUR.

: RZKhim., No. 23 1959, No. 83960

AUTHOR

: Trumic.

INST.

TITLE

Practical Sterility of Meat Preserves

ORIG. PUB.

: Tehnika, 1958, 13, No 3, Prehran. ind., 12,

No 3. 39-42

ABSTRACT -

: Reviewed are factors, that determine practical sterility of preserves and that prevent reaching their absolute sterility; Discussed are problems of heat menetration into the preserves' contents. Heat stability of certain individual microorganisms types is established.

CARD:

: CZECHOSLOVAKIA

H

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Food Industry RZKhim., No. 23 1959, No. 83963

ABS. JOUR. : RZANim., No.

AUTHOR

: Musil. F.: Orel. V.

INST.

TITLE

: Suitability of Early Spring Eggs for Preser -

ving

ORIG. PUB.: Prumysl notravin, 1958, 9, No 1, 44-49

ABSTRACT

: It has been established that eggs, layed in the period of spring frosts, may be preserved if the egg-shell is free of cracks. Eggs having red egg-white, after sorting out, may be used in the manufacture of melanges; with a thorough homogenizing its quality will conform

to that made of normal eggs.

CARD:

1/1

COUNTRY

: RUMANIA

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Food Industry

ABS. JOUR.

No. 83967 : RZKhim., No. 23 1959,

AUTHOR.

: Ienistea. C.: Ieremia, T.

INST.

: Microbiolgical Studies of Fresh Water Fish in TITLE

the Storage at 16-190

ORIG. PUB.

: Igiena, 1959, 8, No 2, 145-150

ABSTRACT.

: Review of the microbiological analyses results

CARD:

: POLAND

CATEGORY

: Chemical Technology. Chemical Products and

Their Amplications. Synthetic Polymers.*

ABS. JOUR.: RZKhim., No. 23 1959, No. 84015

AUTHOR

: Stenniak. L.

INST.

TIPLE

: Automobile Parts Made of Plastics

ORIG. PUB.: Techn. metoryz., 1958, 8, No 10-11, Biul.

inform. ITS, 7, No 5, 4

ABSTRACT

: Described is the annlication of plastics in place of metals and other materials in the manufacture of automobile parts: bearings, stonners, handles, coverings, parts of brake cylinder and steering shaft, seats, etc. It has been established, for instance, that soring stonners made of glass-textolite stand well after 15-25 thousand kilometers while bronze stonners could not last more than 12 thousand

kilometers. -- L. Sedov

*Plastics. 1/1

CARD:

COUNTRY

: POLAND

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Synthetic Polymers. *

ABS. JOUR.

: RZKhim., No. 23 1959, No. 84021

AUTHOR

: Slawinski, Z.

INST.

TITLE

: Phenoloc Raw Materials for the Manufacture of

Phenol Type Plastics in Poland

ORIG. PUB.

: Przem. chem., 1958, 37, No 10, 621-627

ABSTRACT

: Reviewed is further expansion of raw materials for the synthesis of phenol type plastics employing m-cresol, tricresol and xylenols.

-- L. Sedov.

*Plastics.

CARD:

. CZECHOSLOVAKIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications.

ABS. JOUR. : RZKhim., No. 23 1959, No. 84023

AUTHOR

; Janis, F.; Kadlec, A.

INST. TITLE

: Determination of Thermal Expansion of Plastics

ORIG. PUB.: Chem. prumys1, 1958, 8, No 10, 552-554

ABSTRACT

: Specific volumes and coefficients of thermal expansion of the melts were determined (while cooling gradually) of polycaprolactam, of a conclymer of canralactam and of C-methylcaprolactam (90: 10) of polyethylene and of polystyrol in the temperature range of 20 - 2500. Thus obtained specific volume values were comvared with the results obtained from the vichnometric measurments. It was established that at temperatures of 20 to 30° the difference in density measurements by the two methods comprized no more than 0.1%. -- L. Sedov.

CARD:

1/1

COUNTRY CATEGORY : CZECHOSLOVAKIA

: Chemical Technology. Chemical Products and Their Applications. Synthetic Polymers.*: RZKhim., No. 23 1959, No. 84039

ABS. JOUR.

AUTHOR

: Dolezel, B.

INST. TITLE

: Effect of Sulfuric, Nitric and Hydrochloric Acids on the Non-Plasticized Polyvinylchloride

ORIG. PUB.

: Chem. orumys1, 1958, 8, No 10, 554-558

ABSTRACT

: Samples of polyvinylchloride (I) (with 2% of lead stearate), measuring 30 × 80 × 3mm, were placed in a vessel, containing 75 ml of acid, and after a definite time interval were weighed, thus determining differences in weight of the samples. It was found, that "m" - quantity of a substance, absorbed by the samples during "t" time, and "m", -quantity of a substance, consumed in "t" time are related to eachother in the following way: 1gm =K(1gt--lgt]) + lgm], where K is a constant.

*Plastics.

CARD:

H COUNTRY CATEGORY ABS. JOUR.: RZKhim., No. 23 1959, No. 84039 AUTHOR INST. TITLE ORIG. PUB. : ABSTRACT : It has been also found that the change of sam-Con'd nles' weight, immersed into sulfuric acid, decreases with increased concentration of the acid. With a 50% or higher acid concentrations the destruction of nolymer begins, that proceeds at a noticeable rate only at temperatures > 100 dilute sulfuric acid does not affect mechanical properties of I; concentrated acid - increases tensile strength and hardens, while elongation of the material decreases. In the action of nitric acid, quantity of the absorbed substances increases with time and 2/3 CARD: COUNTRY H CATEGORY : RZKhim., No. 23 1959, No. 84039 ABS. JOUR. AUTHOR INST. TITLE ORIG. PUB. :temperature and decreases with increased con-ABSTRACT centration of the acid. A concentrated acid Con'd causes lowering of the molecular weight of I and breaking off of hydrogen chloride. After 90 days immersion in a 40% nitric acid at 20 and 40°, hardening of the samples was noted respectively by 10 and 20% and decrease of the samples' elongation upon stretching. Its tensile strength was practically unaffected. Hydrochloric scid has no noticeable effect on the mechanical properties of I, even at high concentrations. -- L. Sedov. CARD: 3/3

: POLAND

LI

CATEGORY

: Chemical Technology. Chemical Products and

Their Annlications. Synthetic Polymers.*

ABS. JOUR.: RZKhim., No. 23 1959, No. 84043

AUTHOR

: Hertz, Z.

INST.

d nest

TITLE

: Preparation of Hard Polyvinylchloride for the

Manufacture of Chemical Amparata

ORIG. PUB. : Przem. chem., 1958, 37, No 9, 609-611

ABSTRACT

A brief review of conference data vertaining to the manufacture of apparata from polyvinyl-chloride used for storage and transport of chemical products (collectors, process lines, linings for metal or concrete collectors, comprizing tiles made of "viny-plast" and others).

*Plastics.

CARD:

1/1

COUNTRY

: POLAND

H

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Synthetic Polymers. *

ABS. JOUR.

: RZKhim., No. 23 1959, No. 84044

AUTHOR

: Usarewicz. B.

INST.

ucs

TITLE

: Amplication of Polyvinylchloride in the

Furniture Industry

ORIG. PUB.

: Przem. drzewny, 1959, No 1, 12-13

ABSTRACT

:Investigated was the possibility of employing polyvinylchlorides the advantages of which are: low density, sufficient mechanical strength, firebroof resistance, and mechanical workability with regard to the ease of installation as table tops, in the manufacture of chairs (made of tubing and sheets), chair and sofa stuffing, and upholstery ("penoplast" and artificial chamois made of polyvinylchloride base) and as covering for kitchen furniture.

—— L. Sedov.

*Plastics.

CARD:

: POLAND

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Synthetic Polymers.*

ABS. JOUR. : RZKhim., No. 23

1959, No. 84045

AUTHOR

: Laskawski. W.

INST.

TITLE

: Study of Polyvinylchloride Plastics. I. General Properties of Polyvinylchloride Plastics.

ORIG. PUB.: Przem. chem., 1958, 37, No 9, 606-607

ABSTRACT

: Description of the composition, properties and refining of polyvinylchloride plastics by the methods of immersion, filling of hollow forms, impregnation of fabrics, pressing, dusting and foaming .-- L. Sedov.

*Plastics.

CARD:

1/1

COUNTRY

: GDR

H

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Synthetic Polymers.*

ABS. JOUR.

: RZKhim., No. 23 1959, No. 84071

AUTHOR

: Strubell, W.

INST. TITLE

: Organic Peroxides. Employed in the Plastics

Industry, and Their Grinding to Size

ORIG. PUB.

Plaste und Kautschuk, 1958, 5, No 4, 134-135

ABSTRACT

A review. The basic reason for explosions, occuring during the grinding of organic meroxides (OP) is the formation of neracids under the influence of moisture, and also the autodecomposition of OP with the liberation of atomic oxygen, that causes an excessive generation of heat from the finely divided OP particles in the grinding and storage. Reviewed are various methods of OP grinding: grinding in a mixture with inert fillers; derivation

*Plastics.

CARD:

CATEGORY :

ABS. JOUR.: RZKhimi, No. 23 1959, No. 84071

AUTHOR: INST.: TITLE:

ORIG. PUB. :

ABSTRACT Con'd of finely dispersed OP from alkaline water solutions in the presence of Ca(OH)2 or of quartz powder; grinding in the form of suspensions in certain organic or inorganic solvents, drying of wet ground OP in mixtures with MgO. the bibliography covers 8 references.

-- V. Gel'nerina

GARD: 1/1

COUNTRY : CZECHOSLOVAKIA

CATEGORY : Chemical Technology. Chemical Products and

Their Annlications. Synthetic Polymers*

ABS. JOUR. : RZKhim., No. 23 1959, No. 84102

AUTHOR : Lesek, F.; Kudelka, F.

INST. :TITLE : Derivation of Ion Exchange Resins by "Granular"

Condensation

ORIG. PUB. : Chem prumysl, 1958, 8, No 10, 545-551

: The investigation covered certain interdenendencies of the effects of apparata and physical conditions of "granular" poly-condensation on the size of granules formed. A mathematical dependency between the diameter of granules and the Raynolds and Weber numbers

was established. -- L. Sedov.

Plastics.

CARD: 1/1

: RUMANIA

H

CATEGORY

: Chemical Technology. Chemical Product and

Their Applications. Caoutchouc, Natural and*

ABS. JOUR.: RZKhim., No. 28 1959, No. 84188

AUTHOR

: Blum, A.

INST.

é ma

TITLE

: Technical News in the Rubber Industry

ORIG. PUB.: Ind. usoars, 1959, 6, No 1, 18-22

ABSTRACT : A review.

*Synthetic Bubber.

CARD:

1/1

COUNTRY

: RUMANTA

H

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Caoutchouc. Natural and *

ABS. JOUR.

: RZKhim., No. 23 1959, No. 84193

AUTHOR

: Chircoiasu, C.

INST.

6 ~***

TITLE

: Problems of the Latex Technology. I, II.

ORIG. PUB.

: Ind. usoara, 1958, 5, No 10, 384-386; No 12,

465-468

ABSTRACT .

: A review. The bibliography includes 27 titles.

... I. Shmurak.

*Synthetic Rubber.

CARD:

GDR

CATEGORY Chemical Technology. Chemical Products and Their Amplications. Caoutchouc. Natural and *

RZKhim., No. 23 1959, No. 84201 ABS. JOUR. :

AUTHOR

: Hofmann. G.

INST.

TITLE

Synthetic "Natural" Caoutchouc

ORIG. PUB.: Plaste und Kautschuk, 1959, 6, No 3, 131-135

: A review. The bibliography includes 26 titles. ABSTRACT

-- M. Bukhina.

*Synthetic Rubber.

CARD:

1/1

COUNTRY

: RUMANIA

CATEGORY

: Chemical Technology. Chemical Products and Their Annlications. Caoutchouc. Natural and*

1959, No. 84211 : RZKhim., No. 23 ABS. JOUR.

AUTHOR

: Jehac, C.; Bunghinz, S.

INST:

TITLE

: Application of Butadiene-Styrol Polymers, Plasticized with Oil (Buna OP) in the Rumanian

Rubber Industry.

ORIG. PUB.

:Ind. usoara. 1958, 5, No 7, 270-272

ABSTRACT

: The mlasticizing of Buna S-3 and SKS-30 rubber is affected with the use of petroleum residue (commercial E-5 grade), having the following properties: specific gravity (150), 0.995--1.015, flash point 245-2700, pour point of -40 to + 450, viscosity (Engler) at 500 10-150 ash > 0.2%, water content, nil. Plasticizing is acheaved in a mixer, the quantity of E-5 is 40% basis rubber. Conditions employed:

*Synthetic Rubber.

CARD:

COUNTRY CATEGORY H

ABS. JOUR.: RZKhim., No. 23 1959, No. 84211

AUTHOR

INST.

TITLE

GRIG. PUB. :

ABSTRACT

: Buna 8-3 is introduced into the mixer while mixing for 4 minutes; this is followed by the E-5 addition during the next 11 minutes at 70-80°; after 15 minutes the product is stretched out into sheets, rolling the latter into cylindrical rolls, prior to mixing they are stored \$ 24 hours. The product, called Buna E-40, lowers the consumntion of synthetic rubber by 15-20%, it improves technological properties of the mixtures by 10-15%, cheapens their production cost by 7-10% and eliminates thermal depolymerization .-- G. Markus.

CARD:

2/2

COUNTRI

: CZECHOSLOVAKIA

: Chemical Technology. Chemical Products and CATEGORY Their Applications. Caoutchouc. Natural and*

ABS. JOUR.

: RZKhim., No. 23 1959, No. 84214

AUTHOR

: Beniska, J.

INST. TITLE

: Effect of Activators on the Vulcanization

Process (III). Action of Zinc Oxide on the Vulcanization of Mixtures Containing Dinhe-**

ORIG. PUB.

: Chem. zvesti, 195% 12, No 10, 599-605

ABSTRACT-

: Effect of 2n0 on the rate of S addition (R) and on the formation of cross-bondages (F) of the mixtures of SKB-35 and NK containing diphenylguanidine (I) was investigated. ZnO has no practical effect on R when present in the mixtures of SKB-35 and NK as well as on F in the mixtures, containing SKB-35. Mixtures containing NK, ZnO affects F. The number of

*Synthetic Rubber. **nylguanidine.

CARD:

Ħ

COUNTRY :

ABS. JOUR. : RZMhim., No. 23 1959, No. 84214

AUTHOR INST.

ORIG. PUB. :

ABSTRACT Con'd than in similar mixtures with I are preater than in similar mixtures containing mercaptobenzothiazol. ZnS is formed in the vulcanization, its quality depends on the type of promoter used in a rubber. The greatest quantity of ZnS forms in the mixtures containing NK and in the presence of I. For Part II see Ref. Zhur Khimiye, 1959, No. 13, 48014.

CARD:

2/2

COUNTRY

GDR

H

: Chemical Technology. Chemical Products and Their Amplications. Caoutchouc. Natural and*

ABS. JOUR.

: RZKhim., No. 23 1959, No. 84235

AUTHOR

: Krizek, V. Rybnikar, F.

INST.

\$ 600

TITLE

: Microscopic Determination of Rubber Products' Fading.

ORIG. PUB.

: Plaste und Kautschuk, 1959, 6, No 3, 113-117

ABSTRACT

: Described is the method of identification of the fading ingredient (antioxidants, promoters /accelerators, S. paraffine). The faded substance is washed away from the surface of rubber with benzene, precipitated with a solution containing NK. followed by a microscopic examination in polarized light. The ingredient is identified through the observation of its crystalline structure. Presented are microphotographs for all the ingredients studied.

— M. Bukhina.

*Synthetic Rubber.

CARD:

: HUNGARY

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Artificial and Synthetic*

1959, No. 84272

ABS. JOUR. : RZKhim., No. 23

AUTHOR

: Horovitz. M.

INST.

TITLE

: New Trends in the Manufacture of Synthetic

Fibers.

ORIG. PUB. : Technika (Magyar), 1959, 3, No 3, 5.

ABSTRACT

: A brief description of chemical and physico--mechanical methods employed in the manufacture of synthetic fibers for the elimination of shortcomings in their quality (low absorptive capacity to water, poor thermo-insulating properties, overall appearance) - the use of co-polymers, obtainment of fibers with different cross-sectional shape, etc. -- S. Rosenfeld

*Fibers.

CARD:

1/1

COUNTRY

: BULGARIA

CATEGORY

: Chemical Technology. Chemical Products and

ABS. JOUR.

Their Applications. Artificial and Synthetic*: RZKhim., No. 23 1959, No. 84276

AUTHOR

: Fanin, M.

INST.

TITLE

: Naylon Synthetic Fibre

ORIG. PUB.

:Biol. i khimiya (Bulg.), 1959, No 1, 30-33

ABSTRACT.

: Production , properties and applications of the polyamide fibers (an article for chemistry

school teachers)

*Fibers.

CARD:

: CZECHOSLOVAKIA COUNTRY : Chemical Technology. Chemical Products and CATEGORY Their Applications. Artificial and Synthetic* ABS. JOUR. : RZKhima, No. 23 1959, No. 84284 : Kalafut, S.; Slivovsky, L. AUTHOR INST. : Effects of Zinc Sulfate and of Triethanolamine TITLE on Shaping of the Viscose Fibers. ORIG. PUB. : Chem. orumys1, 1959, 9, No 2, 104-108 : Effects of zinc sulfate (I) and of triethanol-ABSTRACT amine (II) on the quality of viscose fibers was investigated. It was established that II increases the diffusion of H2SO4(III) into the interior of fibers. Homogeneous fibers (cross--sectionally) are being formed in a weaving bath containing (in gr/l) 52-120 of I, 10 of II and 100-120 of III. Strongest fibers are obtained with the weaving bath filled with 90 g/Q of III (while the rate of weaving is *Fibers. 1/2 CARD: COUNTRY CATEGORY 1959. No. 84284 : RZKhim., No. 23 ABS. JOUR. AUTHOR INST. TITLE ORIG. PUB. :30 m/min). II tends to retard the decomposi-ABSTRACT tion of fiber, contained in a weaving bath. Con'd The method of controlling the weaving process has been developed. It is based on the color penetration as judged from the examination of the cross-sectional fiber.

H

CARD:

: CZECHOSLOVAKIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Artificial and Synthetic*

ABS. JOUR. : RZKhim., No. 23 1959, No. 84285

AUTHOR

: Pikler, A.; Svitek, J.

INSI.

TITLE

Study of Hemicelluloses Derived from Pressed

Liquors Obtained from Viscose Manufacture

ORIG. PUB.: Chem. prumyel. 1958, 8, No 12, 661-665

ABSTRACT : No ebstract.

*Fibers.

CARD:

1/1

COURTRY

: YUGOSLAVIA

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Artificial and Synthetic*

ABS. JOUR.

: RZKhim., No. 28 1959, No. 84286

AUTHOR

: Pozlev, A.

INST.

TITLE

: Finishing of Viscose Fibers.

ORIG. PUB.

: Tekstil, 1958, 7, No 12, 1049-1054

ABSTRACT.

. No abstract.

*Pibers.

CARD:

: CZECHOSLOVAKIA

F

CATEGORY

: Chemical Technology. Chemical Products and Their Applications, Artificial and Synthetic*

ABS. JOUR.: RZKhimi, No. 23 1959, No. 84293

AUTHOR

: Hurt, V.; Jambrich, M.

INST. TITLE

: Investigation of Certain Textural and Structural Variations of the "Sylon" Fibers. II

ORIG. PUB.: Chem. zvesti, 1958, 12, No 8, 496-508

ABSTRACT

: Through the determination of the degree of darkening resulting from the radial and circular application methods (to the fabrics half--widths), variations in the fiber orientation in the "sylon" fibers (tackle string) was investigated in the process of a continuous stretching. It was established that in a certain range of stretching a temporary orientation occurs which points to a possibility of the existance of a certain miniature macroscopical effect in a case when the continuous

*Fibers.

CARD:

1/2

COUNTRY CATEGORY

: RZKhim., No. 23 1959, No. 84293 ABS. JOUR.

AUTHOR INST. TITLE

ORIG. PUB.

ABSTRACT Con'd

stretching takes place above the temperature of the second order transition. Changes of the darkening intensity of the diotronic reflexes (002) were studied, starting with a degree of stretching of 1: 2.6 and up to a point when fibers busted. The minimum on the curve (the darkening intensity of diatrovic reflexes vs the degree of stretch) corresponds to optimum mechanical properties of the tested samples. Possible mechanism of a continuous stretching process above the transition temperature of second order is considered. For Part I see Ref Zhur.-Khimiya, 1959, 10, 37426.--A.Rogovina.

CARD:

: POLAND

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications, Artificial and Synthetic*

ABS. JOUR.: RZKhimi, No. 28 1959, No. 84298

AUTHOR

: Rozycki, A.

INST.

TITLE

: "Polan". Problems and Persnectives of Applica-

tion.

ORIG. PUB.: Techn. wlokienn., 1959, 8, No 2, 58-60

ABSTRACT

: Properties and fields of application of the

polycaprosmide fiber - "polan". -- I. Fodiman.

CARD:

*Pihers. 1/1

: POLAND

COUNTRY CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Artificial and Synthetic*

ABS. JOUR.

: RZKhim., No. 23 1959, No. 84300

AUTHOR

:Stajniak, K.

INST.

TITLE

:Terilen in the Knitting Industry

ORIG. PUB.

:Techn. wlokienn., 1958, 7, No 11-12, 380-382

ABSTRACT

:No abstract.

*Fibers.

CARD:

. HINGARY

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Cellulose and Its Deriva-*

ABS. JOUR.: RZNhim., No. 23 1959, No. 84311

AUTHOR

: Korodi, J.

INST.

£ 600

TITLE

: Problems of the Cellulose-Paper Industry in

Hungary

ORIG. PUB.: Foldr. kozl., 1959, 7, No 1, 45-61

ABSTRACT

: Presented are detailed information pertaining to the development of the cellulose-paper production in the HDR for 1925-1940 and for 1946-1957 periods, geographical location of the plants, raw materials used and to raw materials imported. Presented also are technological data and economics covering the perspectives of further development of this industry.

*tives. Paper.

CARD:

1/1

COUNTRY CATEGORY : CZECHOSLOVAKIA

M

GORY

: Chemical Technology. Chemical Products and

Their Applications. Cellulose and Its*

ABS. JOUR.

: RZKhim., No. 23 1959, No. 84320

AUTHOR

: Kozmal, F.; Bucko, J.

INST.

: Acacia - A New Raw Material for the Cellulose-

-Paner Industry.

ORIG. PUB.

:Nasa veda, 1959, 6, No 1, 3-5

ABSTRACT

Described are experiments in the obtainment of cellulose (C) from acacia by employing sulfite and sulfate methods. In accordance with the first method, the yield of C is 40.9% and with the second is 38.9%. Raw cellulose has a darker color, than that derived from coniferous wood pulp, however, it can be bleached to higher degree of whiteness than the coniferous C. The decellulose content is 89.0%, the absolute viscosity is 16.9 cm. Its strength, after grinding is 4695m.

*Derivatives. Paner.

CARD:

COUNTRY CATEGORY

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 84320

AUTHOR INST. TITLE

ORIG. PUB. :

ABSTRACT : This wood oulp is recommended for special Con'd grades of namer. -- D. Yakesh.

CARD:

2/2

COUNTRY

: RUMANIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Cellulose and Its

ABS. JOUR.

: RZKhim., No. 23 1959, No. 84325

AUTHOR INST.

: Siminescu, C.; Calistru, E.

TITLE

: Viscose Cellulose Derived from Reed

ORIG. PUB.

: Celul. si hirtie, 1959, 8, No 4, 111-117

ABSTRACT.

:Based on the ivestigation of morphological structure and on uniqueness in the degree of nolymerization of macromolecules of the reed viscose cellulose (VC), the conclusion was made that the reed VC quality is not inferior to VC derived from wood pulp. The morphologicel structure was investigated by the K. Heide method, employing 80% H₃PO₄ for the wood VC and 83% H₃PO₄ for the reed VC, as well as with 60% H3PO3. The degree of nolymeriza-

*Derivatives. Paner.

CARD:

COUNTRY. CATEGORY H

ABS. JOUR.: RZKhim., No. 23 1959, No. 84325

AUTHOR INST.

TITLE

ORIG. PUB. :

ABSTRACT Con'd

: zation was determined from solubilities in H3PO4 and by a special fractionation method of the solutions, employing the precipitation with H2SO4 at low temperatures, that insures a nossibility of finding criteria for the classification of celluloses depending on the fractions entering solution and on the initial acidity of the medium.

CARD:

2/2

COUNTRY

: CZECHOSLOVAKIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Amplications. Cellulose and Its *: RZKhim., No. 23 1959, No. 84829

ABS. JOUR.

AUTHOR

: Richter, J.

INST.

TITLE

: Continuous Digestion of Sulfate Cellulose

ORIG. PUB.

:Papir a celul., 1959, 14, No 2, 27-30

ABSTRACT

: Described is a method of continuous digestion presented are equipment diagrams and hasic conditions of digestion. The obtained cellulose was of much higher quality compared to that derived through the use of previous

methods. -- D. Yekesh.

*Derivatives. Paner.

CARD:

CATEGORY : Chemical Technology. Chemical Products and Their Amplications. Cellulose and Its * ABS. JOUR.: AZINim., No. 23 1959, No. 84331 AUTHOR INST. : Utilization of Sawdust in the Manufacture of TITLE Paner ORIG. PUB. : Tsa ou chih kung yeb, k958. No 12. 34-39 ABSTRACT : At the Chinese cellulose-maner factory Yun fang (city of K'un ming) in the production of sulfate wood cellulose (WC) is used sawdust. In the first stape, the sawdust is sifted and sorted (2-3mm X1-2mm in size) and for the wood mass (WM) is sifted in the second classifying stage (1-2mm XO.6-1.0mm in size). The technological Process for the obtainment of WC and WM is described together with further treatment in the production of paper. Presented are *Derivatives. Paper. 1/2 CARD: H COUNTRY CATEGORY : RZKhim., No. 23 1959. No. ABS. JOUR. AUTHOR INST. TITLE ORIG. PUB. : technological characteristics and diagrams ABSTRACT denicting special equipment: sawdust classi-Con'd fiers and WM grinding disc type mills. - A. Zonntag.

CARD:

: RUMANIA COUNTRY : Chemical Technology. Chemical Products and CATEGORY Their Applications. Cellulose and Its * ABS. JOUR. : RZKhim., No. 23 1959, Not 84336 : Ponnel. E. AUTHOR INST. TITLE : Possibility of Reducing Chlorine Consumption in the Existing Bleaching Installations, by Means of Increasing Fiber-Mass Density. I. ** ORIG. PUB. : Celul. si hirtie, 1959, 8, No 4, 117-121 ABSTRACT : On the basis of laboratory and commercial production experiments it is proposed that technological schemes of bleaching, employing calcium chloride, be modified by the replacement of the single stage bleaching (using density of approx. 7%) with a two stage bleaching while employing the same equipment and density of 10%, and having an intermediate washing **Tests Performed at the "Reconstruktsiya" Cellulose Plant (Sulfite Cellulose Section). *Derivatives. Paner. CARD: 1/2 COUNTRY H CATEGORY : RZKhim., No. 23 1959. No. ABS. JOUR. AUTHOR INST. TITLE ORIG. PUB. : step. The reduction of Cl consumntion as much ABSTRACT Con'd es 19% may thus be attained. CARD: 2/2

H - 145

: CHINA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Cellulose and Its *

ABS. JOUR.: AZKhim., No. 23 1959, No. 84343

AUTHOR

: Ch'e ch'eng-chi

INST. TITLE

: Regeneration of Soda from Effluent Streems of

the Cellulose-Paper Production.

ORIG. PUB.: Hua hauch kung yeh, 1959, No 3, 7-8

: No abstract. ABSTRACT

*Derivatives. Paper.

CARD:

1/1

COUNTRY

: RUMANIA

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Cellulose and Its *

ABS. JOUR.

1959, No. 84384 : RZKhim., No. 23

AUTHOR

: Rowland, C.; Blundell, K.

INST.

TITLE

: New Grinding Method of Paper-Mass with Conti-

nuous Feeding

ORIG. PUB.

: Celul. si birtie, 1959, 8, No 2, 42-45

ABSTRACT

Presented is the comparison of paper-mass grinding methods in the washing troughs in accordance with the Blake-Clauson method (having a double cycle) and in accordance with the new grinding method equinned with a continuous feeding. It is indicated that the new method has advantages of a continuous, assuring a nossibility of operation with a cons-

tant loading. The diagram is presented.

*Derivatives. Paner.

1/1 CARD:

COUNTRY CATEGORY : HUNGARY

: Chemical Technology. Chemical Products and Their Applications. Cellulose and Its *

1959, No. 84350

ABS. JOUR. : RZKhim., No. 23

AUTHOR

Vamos, G.; Mero, T.

INST.

Testing of Paner Made of Fir and Straw Cellu-TITLE

lose

ORIG. PUB.: Papiripar es magyar graf., 1959. 3. No 2.

ABSTRACT

: No correlation between properties of mixtures and the nercent content of fir and straw cellulose (C), ground to varying degrees, was obtained. From the mixtures of fir and straw C, namer with an optimum static and dynamic strength may be obtained. Paper made from a mixture containing 20% of straw C and 80% wood C had higher tearing strength, higher "double" bending resistance, superior ability to dehydration, greater whiteness and increa-

*Derivatives.Paper.

CARD:

1/2

COUNTRY CATEGORY

H

ABS. JOUR.

1959, No. 84350 : RZKhim., No. 23

AUTHOR

INST.

TITLE

ORIG. PUB.

ABSTRACT Con'd

sed permeability to air at a lower energy consumption and lower linear deformation than values calculated from the respective concentration of commonents present in the mixture.

CARD:

· POLAND COUNTRY : Chemical Technology. Chemical Products and CATEGORY Their Applications. Cellulose and Its * ABS. JOUR.: RZKhim., No. 28 1959, No. 84350 ; Jaroszewski, J.; Poradowska, H. AUTHOR INST. Experimental Production of the Electro-Insu-TITLE lating Asbestos Paner ORIG. PUB.: Przegl. mamiern., 1959, 15, No 5, 150-154 ABSTRACT : On the basis of laboratory and commercial casting a conclusion was made pertaining to the possibility of production of such a paper from 100% ashestos. The conducted experiments employed asbestos of the following different grades: Soviet, African and Chinese. The best results were obtained with the Soviet asbestos type L-1-60, purified of the accompanying mineral substances. As a binding agent, it is recommended to employ starch as an additive to a roll in a quantity of 5% basis weight of *Derivatives. Paner. 1/2CARD: H COUNTRY CATEGORY : RZKhim., No. 23 1959, No. 84350 ABS. JOUR. AUTHOR INST. TITLE ORIG. PUB. :dry asbestos. It is possible to use other ABSTRACT binding agent, that improve mechanical and Con'd. dielectric properties of paper. --Ye. Gurvich.

2/2 -

: CZECHOSLOVAKIA

LŢ

CATEGORY

Chemical Technology. Chemical Products and

Their Amplications. Cellulose and Its *

ABS. JOUR.: AZKhim., No. 23 1959, No. 84359

AUTHOR

: Decker, V.

INST. TITLE

NST. : -

: Manual Production of Asbestos Paner in Slova-

kia

ORIG. PUB.: Panir a celul., 1959, 14, No 3, 66-67

ABSTRACT

* A historical review. The bibliography includes

6 titles. -- D. Yakesh.

*Derivatives. Paper.

CARD:

1/1

COUNTRY

: RUMANIA

11

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Cellulose and Its *

ABS. JOUR.

: RZKhim., No. 23 1959, No. 84360

AUTHOR

: Iliescu, G.; Ponovici, V.

INST.

: ---

TITLE

: Experiments on the Enrichment of Paner Fillers

I. Kaolin.

ORIG. PUB.

: Celul. si hirtie, 1959, 8, No 4, 122-127

ABSTRACT

After the description of the most applicable methods of enriching kaolin (K) the authors present data on the treatment of K with Na and Zu hydrosulfites, the result of which fully satisfy requirements of the paper industry. The results of commercial experiments are analogical to those obtained with imported K.

*Derivatives. Paner.

CARD:

· : POLAND

CATEGORY

: Chemical Technology. Chemical Products and

Their Applications. Cellulose and Its * RZKhim., No. 23 1959, No. 84362

ABS. JOUR. : RZKhim., No.

AUTHOR

: Hochanz. E.

INST.

TIPLE

: Vegetable Gums and Their Application in the

Manufacture of Paper.

ORIG. PUB.: Przegl. naniern., 1959, 15, No 3, 74-77

ABSTRACT

: Review of literature for the past 10 years. The bibliography includes 19 references.

-- Ye. Gurvich.

CARD:

*Derivatives. Paper.

1/1

COUNTRY

: POLAND

H

CATEGORY

: Chemical Technology. Chemical Products and Their Applications, Cellulose and Its *

ABS. JOUR.

1959, No. 84370

: RZKhim., No. 23

AUTHOR

: Wierzbicki. A.

INST.

TITLE

: Production of Woodfibre Tiles in Poland in

1958/59

ORIG. PUB.

: Przegl. papiern., 1959, 15, No 4, 111-114

ABSTRACT -

: The total output of tiles in 1958 comprized 64.5 thousand tons or 17.3 million m^2 (Poland) occuries the 6th place in Europe after Sweden Finland, West Germany, Norway and France, excluding USSR). Hard and morous tiles are being manufactured. The manufacture of tiles having hard surface is acheaved by treating finished tiles with oil followed by thermal hardening. The same approach is being followed in the manufacture of perforated accustical tiles.

CARD:

*Derivatives. Paner. 1/2

COUNTRY Ħ CATEGORY

1959, No. 84370 ABS. JOUR. : RZKhim., No. 23

AUTHOR INST. TITLE

ORIG. PUB. :

ABSTRACT Con'd

: Experimental lacquered tiles, having nitro-, melamino-, and enameled coatings have been produced, In 1959 the increase in production forecast is expected to be 20% higher compared to 1958. -- Ye., Gurvich.

CARD:

2/2

COUNTRY : RUMANIA

CATEGORY Chemical Technology. Chemical Products and Their Amplications. Cellulose and Its *

: RZKhim., No. 23 1959. No. 84383 ABS. JOUR.

: Diaconescu, V.; Feldman, D.; Asandei, N. AUTHOR

INST.

: Modern Testing Methods in the Cellulose-Paner TITLE Industry

:Celul. si hirtie, 1959, 8, No 3, 77-87 ORIG. PUB.

A review of chromatographic, spectroscopic ABSTRACT (in the ultraviolet and infrared regions) and certain methods, employing isotones, that find an ever increasing application in the cellulose-paper industry. Advantages of these methods are emphasized (with regard to their accuracy, ranidity of performance, specificity of application and reproducibility of the results)

over the classical methods. Presented are 12 diagrams and a schematic diagram devicting

*Derivatives. Paner. 1/2

COUNTRY CATEGORY H

ABS. JOUR, : RZKhimi, No. 23 1959, No. 84383

AUTHOR

INST.

TITLE

ORIG. PUB. :

ABSTRACT Con'd

the apparatus (including the ion exchange chamber) that employs isotones. The bibliogra-

phy covers 60 references. -- A. Marin.

CARD:

2/2

COUNTRY

: RUMANIA

CATEGORY

Chemical Technology. Chemical Products and

Their Applications. Cellulose and Its *

ABS. JOUR.

: RZKhim., No. 23 1959, No. 84386

AUTHOR

: Gavrilescu, G.

INST.

TITLE

: Maintenance, Adjustment and Calibration of the

"Square" Belances.

ORIG. PUB.

: Celul. si hirtie, 1959, 8, No 2, 60-61

ABSTRACT

: Reviewed is the schedule of exploitation of the "square" halances used in vaver factories. Balances must be checked monthly by an experienced specialist. The results of his calibrations must be entered into a record book A nossibility of adopting balances to the handling of paper 100 x 100 cm inside and to the weighing of paper cut to a smaller size has been indicated. -- G. Markus

*Derivatives. Paner.

CARD:

: RUMANIA

H

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Dyeing and Chemical *

1959, No. 84413 ABS. JOUR. : RZKhim., No. 23

AUTHOR

: Lowg, A.; Pavel, D.; Hammrich, F.

INST. TITLE

Experiments on the Sizing of Knobby Fiber at

the "Vasia Vasilescu" Textile Plant

ORIG. PUB.: Ind. textila, 1958, 9, No 12, 471-475

ABSTRACT

. Experiments on the sizing of knobby fibers with the aid of carboxymethylcellulose (I) were conducted for the nurnose of complete substitution of starch. In the preparation of sizing solution I is soaked in water for 20 bours prior to mixing in an agitator at 40-450 with the addition of sulfated oil. Experiments revealed the following: from the technological standpoint I may replace starch when employed

*Treatment of Textile Materials.

CARD:

1/3

COUNTRY

CATEGORY

ABS. JOUR.

: RZKhim., No. 23 1959,

AUTHOR

INST.

TITLE

ORIG. PUB.

ABSTRACT Con'd

: in sizing of knobby fibers; an increase in the fiber strength and decrease in their elasticity is somewhat lower that they are when starch is used for sizing, however, this does not affect adversely productivity of the weaving machines; oH of the sizing solution made with I, has to be adjusted from 10.5 to 8.0--8.5; in order to insure a rapid dissolution, I has to be used in the form of a powder. Removal of the sizing is acheaved by washing in worm water at 40-50° in the course of 15--20 minutes. In the bleaching of fabrics.

CARD:

H

COUNTRY CATEGORY

ABS. JOUR. : RZXhim., No. 28 1959, No. 84413

AUTHOR INST. TITLE

ORIG. PUB.

the removal of I takes place when the fabric ABSTRACT

is boiled. -- G. Markus Con'd

CARD:

3/3

COUNTRY

: YUGOSLAVIA

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Dyeing and Chemical* RZKhim., No. 23 1959, No. 84424

ABS. JOUR.

AUTHOR

: Priskic, I.

INST. TITLE : Trends in the Development of Dyeing

ORIG. PUB.

: Tekstil, 1959, 8, No 3, 179- 188

ABSTRACT

: keview of the conditions prevailing in the textile dyeing industry during the mast 20 years. An attempt is made to explain wide use of certain classes of dyes and of dying methods with the present-day developments in the realm of chemistry and narticularly in the realm of synthetic fibers. -- T. Budkevich

*Treatment of Textile Materials.

CARD:

: CHINA

H

CATEGORY

Chemical Technology: Chemical Products and Their Applications. Dyeing and Chemical*

ABS. JOUR. : RZKhim., No. 29 1959, No. 84458

•

: Liu Ching-lin

AUTHOR INST.

TITLE

: New water Renellant Prenaration - CR - and

its Application

ORIG. PUB. : Jen chen t'ung vao, 1956, No 11, 38-39

ABSTRACT

A new preparation, CR, has been synthesized, that results in stable water revellant properties of the fabrics. It is being employed in the treatment of cotton, silk, acetylcellulose viscose and nylon fibers. It may also be applied to leather end other materials. The solution for the impregnation of textiles is prepared, for example, in the following manners the CR preparation is mixed with 10 times its volume of cold water, the mixture is then

*Treatment of Textile Materials.

CARD:

1/2

Ħ

COUNTRY CATEGORY

ABS. JOUR.

: RZKhim., No. 23 1959, No. 84453

AUTHOR

INST.

TITLE

ORIG. PUB.

ABSTRACT .

heated to 90-95°, followed by the dilution with water down to a desired concentration and by cooling to a temperature < 40°. After the impregnation fabrics are dried at 60-70°. The above preparation may be employed for the treatment of fabrics in an admixture with urea-formaldehyde resin precondensate. --A. Zonntag

2/2

YUGOSLAVIA

H

CATEGORY

: Chemical Technology, Chemical Products and Their Applications. Dyeing and Chemical *

ABS. JOUR. : RZKhim., No. 23 1959, No. 84454

AUTHOR

: Recnik, P.

INST.

TITLE

: Basic Impregnation Methods for Rendering Pabrics Water-Tight and Water Repoelent

ORIG. PUB.: Tekstil, 1959, 8, No 3, 202-207

ABSTRACT

: Waterproofing of the fabrics in the textile industry is acheaved through the application of layers of Al, paraffin waxes, silicones, octadecyloxymethylogridine chloride and other substances. Presented are the trade names of substances used for waterproofing, methods of their application, and also testing methods to determine the degree of water-tightness and water-repellent characteristics.

- T. Budkevich.

*Treatment of Textile Materials.

CARD:

1/1

COUNTRY CATEGORY

: HUNGARY

: Chemical Technology. Chemical Products and

Their Applications. Dyeing and Chemical * 84465

ABS. JOUR.

1959, No. : RZKhim., No. 23

AUTHOR INST. TITLE

:Rusznak, I.; Fehervari, M.; Dolesch, I.; **

: Newest Findings in the Stability to Light of Dyed Textiles and Dyes.

ORIG. PUB.

:Magyar textiltechn., 1959, 11, No 3, 104-106

ABSTRACT

:Investigation of the dye fading mechanism of the textile fabrics and dyes in the exposure to ultraviolet light permitted establishing the fact that the damage to cellulose depends upon the wavelength of ultraviolet light. The rate of fading in the case of oxyazodyes is greater than that of the corresponding amino--derivatives; in the displacement of meta-position < orto-position < para-position.

**Halasz, E. *Treatment of Textile Materials.

COUNTRY : CATEGORY :

H

ABS. JOUR.: RZKhim., No. 23 1959, No. 84465

AUTHOR : INST. : TITLE :

ORIG. PUB. :

ABSTRACT: A method for making dyes fast developed for the basic dyes (notassium ferrocyanide), that increases the stability of dyeing not lesser than the treatment with phosphomolybdic acid. The formation of dye nigment occurs directly on the fiber surface during dyeing of fabrics that includes fixation with naphtholformalde-

hyde solution. -- S. Rosenfel'd.

CARD: 2/2

COUNTRY : POLAND
CATEGORY : Chemical Technology. Chemical Products and

Their Applications. Leather. Fur. Gelatine.*

ABS. JOUR. : RZKhim., No. 23 1959, No. 84516

AUTHOR : Krzywicki, E.

INST. : TITLE : Crinckled Leather for Shoe Tops

ORIG. PUB. : Przegl. skorzany, 1958, 13, No 7, 163-168

ABSTRACT: The characteristic neculiarity of crinckled leather is its softness and body as compared to the cut leather that resembles oil cloth to the touch. Most often for the manufacture of crinckled leather large raw hides are being employed, thus obtaining a very strong (to tear) and non-elastic leather. Good results in obtaining crinckled leather are feasible

when employing raw pig hides, since pig leather easily loses its characteristic grain

*Tanning Materials. Industrial Proteins.

CARD: 1/6

COUNTRY: H
CATEGORY:
ABS. JOUR.: RZKhim., No. 23 1959, No. 84516

AUTHOR : INST. : TITLE

ORIG. PUB. :

ABSTRACT Con'd and its appearance is thus enhanced. In addition to this, numerous texture imperfections of pigs hides become less prominent after crinkling. Nevertheless, in the treatment of pig leather, having crinckled topside, a good selection of hides derived from mature animals and freshly pickled, is required. The following procedure is normally employed. After a considerable washing and mechanical deciling the hides are smeared with a bair-removing substance along the flesh side, and are allowed to remain smeared for 16-18 hours.

H

CARD:

2/6

COUNTRY :

ABS. JOUR.

: RZKhim., No. 28 1959, No. 84516

AUTHOR : INST. : TITLE :

ORIG. PUB.

ABSTRACT Con'd Hair is then carefully removed with a wooden knife. The de-haired hides (without washing) are treated for 8 hours in a slowly rotated drum with Na₂S solution. The drum rotates intermittently. The ashing (purely alkaline) is conducted in the same drum during the next 8 days followed by a thorough washing. The deashing is achieved with (NH₄)₂SO₄. The degreasing is conducted at 35° with the "levapor PL" preparation, softening for 3 hours, washing and cleaning of the top layer. Softening of the rew hides must be a complete one,

CARD:

COUNTRY CATEGORY

1959, No. ABS. JOUR. : RZKhim., No. 23

AUTHOR INST. TITLE

ORIG. PUB.

soft and must leave an imprint when pressed ABSTRACT with a finger. The raw hide is then treated

in a bath containing 100% water and 8% NaCl (hasis the weight of hide), to which a dilute HoSOA solution is slowly added. Haw hides are left for approx. 12-18 hours in the drum followed by rotating it for 15-20 minutes. pH of the spent pickle solution is 3.5-3.7. The pickled raw hides are then transfered into an empty drum, adding 5% of sawdust and 3% "tannigan supra LH" in the form of a powder, and

H

after rotating the drum for 1 hour, a mixture

CARD: 4/6

H COUNTRY

CATEGORY

No. 84516 23 1959. : RZKhim., No. ABS. JOUR.

AUTHOR INST. TITLE

ORIG. PUB.

ABSTRACT Con'd

: containing 25%" tannigan supra LH", 2.5% acetid acid (85%) and 5% water at a temperature of 20°. This is then followed by the rotation for 1.5 hours followed by the addition of 2% formeldehyde, diluted with 2% water and agitation for 30 minutes. The semi-finished hides are placed for approx. 12-18 hours on the racks, washed for 3-5 minutes with water (350) followed by the finishing tanning in a bath containing 100% water (350) and 5% "retingen R4B". After 45 minutes of agitation (rotation) a distinct crinckling of the top side becomes

5/6 CARD:

H

COUNTRY CATEGORY

ABS. JOUR. : RZKhim., No. 28 1959, No. 84516

AUTHOR INST. TITLE

ORIG. PUB. :

ABSTRACT Con'd

: apparent. Fixation of this crinckling is attain ned with the use of the basic solution of chromic salt or with the "chromozal" preparation (6% by weight of rew hides at a 50% alkalinity) Hides are agitated with the above solution for 2 hours, followed by the addition of Na₂CO₃ solution (slowly). pH of the tanning bath must be 4.3. -- M.Luksemburg.

CARD:

6/6

COUNTRY CATEGORY : CZECHOSLOVAKIA

H

: Chemical Technology. Chemical Products and Their Annlications. Leather. Fur. Gelatine.*

: RZKhim., No.23 ABS. JOUR.

1959, No. 84519

AUTHOR

: Spicka, M.; Krabovsky, V.

INST. TITLE

: Recent Czechoslovakian Investigations on the

Production of Shoe Sole Leather by Chrome-Vegetable Tanning and Comparisom of the Results

: Kozerstvi, 1959, 9, No 1, 6-9, 14 ORIG. PUB.

ABSTRACT

: A review of works pertaining to short-cutting in the technological processing as well as to individual technological methods. The bibliography covers 61 titles .-- M. Luksemburg.

With Those Attained Abroad. *Tanning Materials. Industrial Proteins.

COUNTRY CZECHOSLOVAKIA Chemical Technology. Chemical Products and CATEGORY Their Amplications. Leather. Fur. Gelatine* RZKhim., No. 23 1959, No. 84520 RZKhim., No. 23 ABS. JOUR. : Vago, G.; Reti, J.; Vargova, P. AUTHOR INST. Auto-Oxidation of Vegetable Oils in the TITLE Leather Industry Kozerstvi, 1959, 9, No 2, 41-44 ORIG. PUB. : The auto-oxidation of vegetable oils and its ABSTRACT detrimental effect on the quality of ton shoe leather were investigated. The spoilage occurs mainly due to heating of the dried, unfinished and highly greased too shoe leather. Suitability of an oil for leather greesing may be controlled by determining its iron content, oxidation number and iodine number. It is recommended that in the greasing of leather, oxidation retardants/inhibitors be employed *Tanning Materials. Industrial Proteins. CARD: 1/2H COUNTRY CATEGORY No. 1959. : RZKhim., No. 23 ABS. JOUR. AUTHOR

ORIG. PUB.

INST.

ABSTRACT Con'd

together with the exclusion of sunflower oil.

If this is not possible, the mild sulfonation of the latter is recommended. Tanning properties of the epoxy-compounds were also studied.

— M. Luksemburg.

COUNTRY : POLAND

Chemical Technology. Chemical Products and

Their Applications. Leather. Fur. Gelatine*

ABS. JOUR. : RZKhim., No. 28 1959, No. 84521

AUTHOR : Lasek, W.; Michalec, T.; Kazubek, M.

INST. : -

CATEGORY

TITLE : Chrome Leather With Refined Ton Side

ORIG. PUB.: Przegl. skorzany, 1959, 14, No 2, 50-58; No 3,

81-90

ABSTRACT : Effect of the finishing tanning employing

vegetable and synthetic tanning agents on the physical and chemical properties of chrome leather was studied. In the filling up of leather, predestined for finishing and refining of top side, the best substances for the purpose are extracts of mimosa, neutralized chestnut, quebracho (sulfonated and non sulfonated) and oak; the use of 6% tannides, basis the weight of leather, increases the

*Tanning Materials. Industrial Proteins.

CARD:

1/2

COUNTRY :

CATEGORY

ABS. JOUR. : RZKhim., No. 23 1959, No. 84521

AUTHOR : INST. : TITLE :

ORIG. PUB.

ABSTRACT Con'd thickness of perepherical regions by 20%. The use of cation latex as the first coating and the addition of diene latex to the under coat, improves physical properties of the covering layer of leather having a refined top layer. The addition of pigments to latex or to synthetic resins tends to improve quality of the coating film, while the addition of caseine increases herdness and lowers the stability of a film with respect to repeated bending. — D. Gorin.

CARD: 2/2

: CZECHOSLOVAKIA COUNTRY Chemical Technology. Chemical Products and CATEGORY Their Applications. Leather. Fur. Gelatine* ABS. JOUR. : RZKhim., No. 23 1959, No. 84523 ": Zitko, V. AUTHOR INST. Photometric Determination of the Titration TITLE End Point for Tanning Agents in Accordance with the Lowenthal's Method ORIG. PUB. : Chem. zvesti, 1958, 12, No.9, 533-542 : To 1-15ml of tannide solution are added 0.7ml ABSTRACT of 1% solution of indigocarmine (I), 2ml of dilute H2SO4 (8.62g. in 100ml), water up to 100ml total volume, subjecting the obtained mixture to titration with O.l n. KMnO4 (II) solution in recenticals of the Lange colorimeter, while employing IF 465 filter. The dependency of the solution extinction on the quantity of added II, near the equivalence *Tanning Materials. Industrial Proteins. 1/2 CARD: H COUNTRY CATEGORY 84523 1959, No. : RZKhim., No. 23 ABS. JOUR. AUTHOR INST. TITLE ORIG. PUB. : point (EP) is represented by two straight lines that intersect at the EP. The titration ABSTRACT is conducted till a constant minimum value Con'd of extinction is reached, which does not change upon further addition of II. The method renders more reproducible results than when the titration is carried out with the reliance on the visual observation of endnoint reached with indicator I. With the increase of acidity of the titrated solution, the error increases. The rate of II addition does not affect accuracy of determinations.

2/2

CARD:

-- N. Turkevich.

: POLAND

CATEGORY

: Chemical Technology. Chemical Products and Their Applications. Leather. Fur. Gelatine*

ABS. JOUR. : RZKhim., No. 23

1959, No. 84525

AUTHOR

: Dzieza. R.

INST. TITLE

: Pickling in the Processing of Fur Coat Stocks

ORIG. PUB.: Przegl. skorzany, 1959, 14, No 2, 35-42

ABSTRACT

: Based on the critical review of literature the effect of mickling encountered in the production of furs, the following conclusions were made: 1) for thin furs it is necessary to reduce acid content of pickle solutions ($\leq 3.5 - 4.0\% \text{ H}_2\text{SO}_4$ basis weight of raw materials); the duration - 24 hours, 32 - 37.50 temperature; it is not feasible to employ increased H2SO4 concentrations; it is advantageous to neutralize raw materials after

*Tanning Materials. Industrial Proteins.

CARD:

H

COUNTRY CATEGORY

ABS. JOUR.

: RZKhim., No. 23 1959. No.

AUTHOR

INST.

TITLE

ORIG. PUB.

ABSTRACT Con'd

: pickling; 2) it is advisable that prior to pickling the raw materials be subjected to formaldehyde tanning, that leads to an improvement of leather quality, renders it soft, insures its qualities with respect to body, elasticity and texture to the touch; 3) the use of preliminary formaldehyde tanning retards hydrolysis of the collagenic fibers of the hides when immersed in pickle solutions of high acid concentrations; 4) loosening of the raw hide texture may also be attained through

CARD:

H COUNTRY CATEGORY ABS. JOUR. : RZKhim., No. 23 84525 1959, No. AUTHOR INST. TITLE ORIG. PUB. : : the use of salt solutions; 5) the employment ABSTRACT of formic acid for wickling gives better re Con'd sults than the use of sulfuric acid. -- M. Luksemburg. 3/3 CARD: : RUMANIA COUNTRY : Chemical Technology. Chemical Products and CATEGORY Their Applications. Leather. Fur. Gelatine.* 1959, No. 84529 : RZKhim., No. 23 ABS. JOUR. : Alexa, G.; Chirita, A. AUTHOR : Rumanian Acad. INST. : Problems in the Application of Willow Bark TITLE a Tanning Raw Material in the RDR .- Part II. : Studii si cercetari stiint. Acad. RPR Fil. ORIG. PUB. Issi. Chim., 1958, 9, No 1, 105-114: This investigation covered the determination of tannide content (T) in different varieties ABSTRACT . of willow tree family and in particular in Salix fragilis. For the latter variety the following determinations were made: ontimum extraction temperature, T content, content of sugars, the age and season when bark was collected. Bark may be taken off the trees during the "vegetation" neriod, since T content

CARD:

1/2

H - 16"

remains almost constant, while the quality goes through an ontimum in July, August and

*Tanning Materials. Industrial Proteins.

H

COUNTRY :

ABS. JOUR.: RZKhim., No. 28 1959, No. 84529

AUTHOR: INST.: TITLE:

ORIG. PUB.

ABSTRACT: September. Tannides contained in willow bark con'd belong to the pyrocatechnic group. For Part I see Ref. Zhur.-Khimiya, 1959, No 15, 55915.

-- D. Gorin.

CARD:

2/2

COUNTRY CATEGORY CZECHOSLOVAKIA
Chemical Technology. Chemical Products and
Their Applications. Leather. Fur. Gelatine. *

ABS. JOUR. : RZKhim., No. 28 1959, No. 84580

AUTHOR

:Kotasek, Z.

INST.

: Interaction Between Polyphenols and Polyamides in the Chromatography of Syntanes

ORIG. PUB. : Kozarstvi, 1959, 9, No 2, 35-37

ABSTRACT

A brief review of the results obtained in chromatography of certain Czechoslovakian syntanes and their phenolic components. Chromatographic paper, impregnated with polyamides and polyamide packed columns were used in these tests. Theoretical considerations involved in the interaction between polyphenols and polyamides are discussed with allowances made for the evaluation of tanning properties of phenolic syntanes. — M. Luksemburg.

*Tanning Materials. Industrial Proteins.

CARD:

CZECHOSLOVAKIA

CATEGORY

Chemical Technology. Chemical Products and Their Applications. Leather. Fur. Gelatine.*

1959, No. 84533 : RZKhim., No. 23 ABS. JOUR.

AUTHOR

Halamek, C.; Lacnar, J.; Nemec, B.; Snickova, J

INST. TITLE

Reduction of Swelling of the Flesh Side Gel-

latine

ORIG. PUB. : Kozarstvi, 1958, 8, No 9, 261-263

ABSTRACT

: According to literature date, the swellability of the flesh side gellatine may be reduced by a factor of two, if the dry product is kent for 48-100 hours in the atmosphere of air, saturated with steam at 50°. This method produces demendable results, but requires provision of humidifying chambers as well as increased operating cost as the result of the repeated drying. Based on the above considerations, it is more economical to obtain

*Tanning Materials. Industrial Proteins.

CARD:

1/2

COUNTRY

H

CATEGORY

: RZKhim., No. 23 1959, No. 84533 ABS. JOUR.

AUTHOR

INST.

TITLE

ORIG. PUB.

ABSTRACT . Con'd

: gellatine of a reduced swelling characteristic through the adjustment of certain conditions in the process of its derivation (pH, average concentration, drying conditions).

-- M. Luksemburg.

CZECHOSLOVAKIA COUNTRY Chemical Technology. Chemical Products and CATEGORY Their Applications. Leather. Fur. Gelatine.* 1959, No. 84535 ABS. JOUR. : RZKhim., No. 23 Suchamel, A.; Mazanek, M. AUTHOR INST. : Certain Technological Considerations that TITLE Determine Physical Properties of Artificial Leather Containing Fibrous Reenforcements ORIG. PUB.: Kezarstvi, 1959, 9, No 1, 17-18 Specific characteristics of artificial leather ABSTRACT (made for various applications) are affected by individual steps involved in its technological processing, in addition to other factors of extraneous nature. Described are certain experemental works with allowances made for the basic and specific condition and of their application. *Tanning Meterials. Industrial Proteins. 1/1 CARD: COUNTRY CATEGORY 1959, : RZKhim., No. ABS. JOUR.

TITLE

AUTHOR INST.

ORIG. PUB.

ABSTRACT

CLEGIOLLOVATIA

CATEGORY

High Polymer Chemistry

1959, No. ABS. JOUR. : RZKhim., No. 28 84552

AUTHOR

Schwertassek. K.: Doubek. J.

INST.

TITLE

Intrusion of Iodine into the Oriented Portions of Cellulose Lattice and Accounting for Them

I

I

During the Determination of the Degree of*

ORIG. PUB. :

Textil (Ceskosl.), 1958, 13, No 10, 384-386

ABSTRACT

Validity of a determination method, proposed previously by the authors, was checked. By this method the degree of crystallinity of callulose may be determined as a function of iodine sorption that occurs in the intrusion of iodine into the lattice with concentrations exceeding 8-12% iodine. It was established that the effect of iodine nenetration into the

*Crystallinity With the Aid of Iodine Sorption XIV. Dependence Between the Iodine Sorption and Crystalline condition of Cellulose Fibers.

CARD:

1/2

COUNTRY

CATEGORY

ABS. JOUR.

1959. No. 84552 : RZKhim., No. 23

AUTHOR

INST.

TITLE

ORIG. PUB.

ABSTRACT Con'd

: oriented portions of the lattice has little effect on the determination results. The previously proposed diagram for the low percentage inclusion of iodine, for the so called "degree of gain" remains valid also for the given instance. Presented is an additional diagram, that permits the determination of the crystallinity degree from certain values of the "degree of gain". For Part XI see Ref. Zhur.-Khimiya, 1958, No 22, 76010. __ E.Kazbekov.

2/2 CARD: DGF

I - 1

FOR REASONS OF SPEED AND ECONOMY THIS REPORT HAS BEEN REPRODUCED ELECTRONICALLY DIRECTLY FROM OUR CONTRACTOR'S TYPESCRIPT

THIS PUBLICATION WAS PREPARED UNDER CONTRACT TO THE UNITED STATES JOINT PUBLICATIONS RESEARCH SERVICE, A FEDERAL GOVERNMENT ORGANIZATION ESTABLISHED TO SERVICE THE TRANSLATION AND RESEARCH NEEDS OF THE VARIOUS GOVERNMENT DEPARTMENTS